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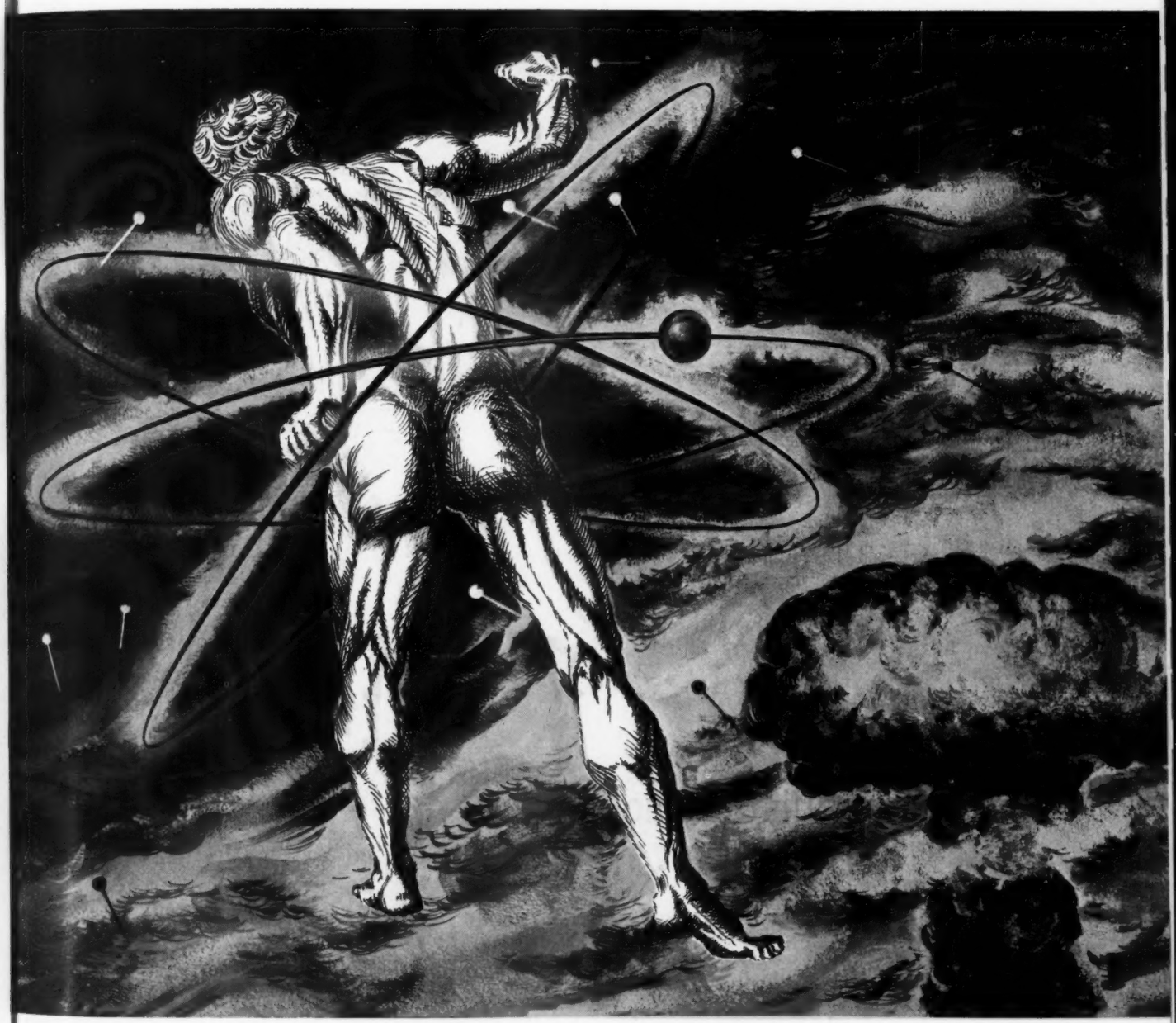

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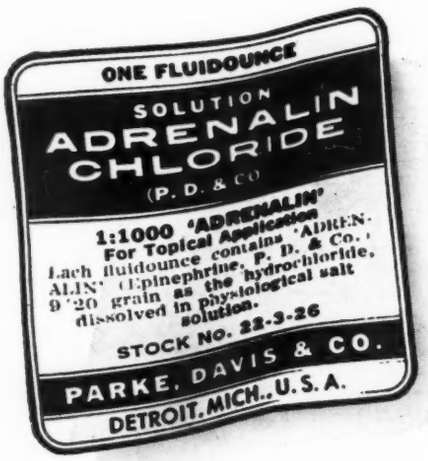

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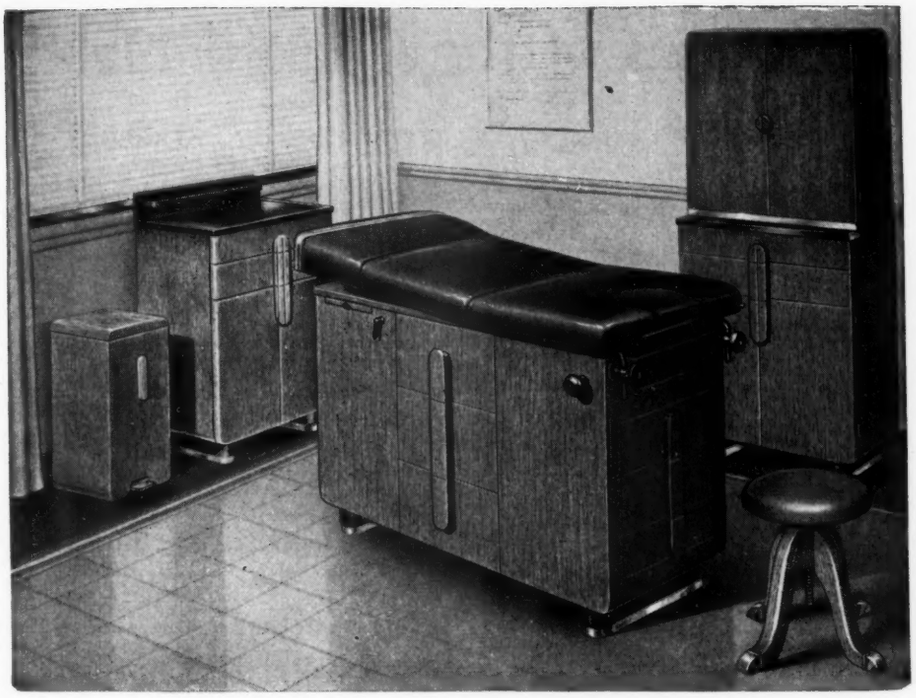

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L. Fernald Foster, M.D.....919 Washington, Bay City
Mr. J. Joseph Herbert.....127 S. Cedar, Manistique

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W. D. Barrett, M.D.....1553 Woodward Ave., Detroit
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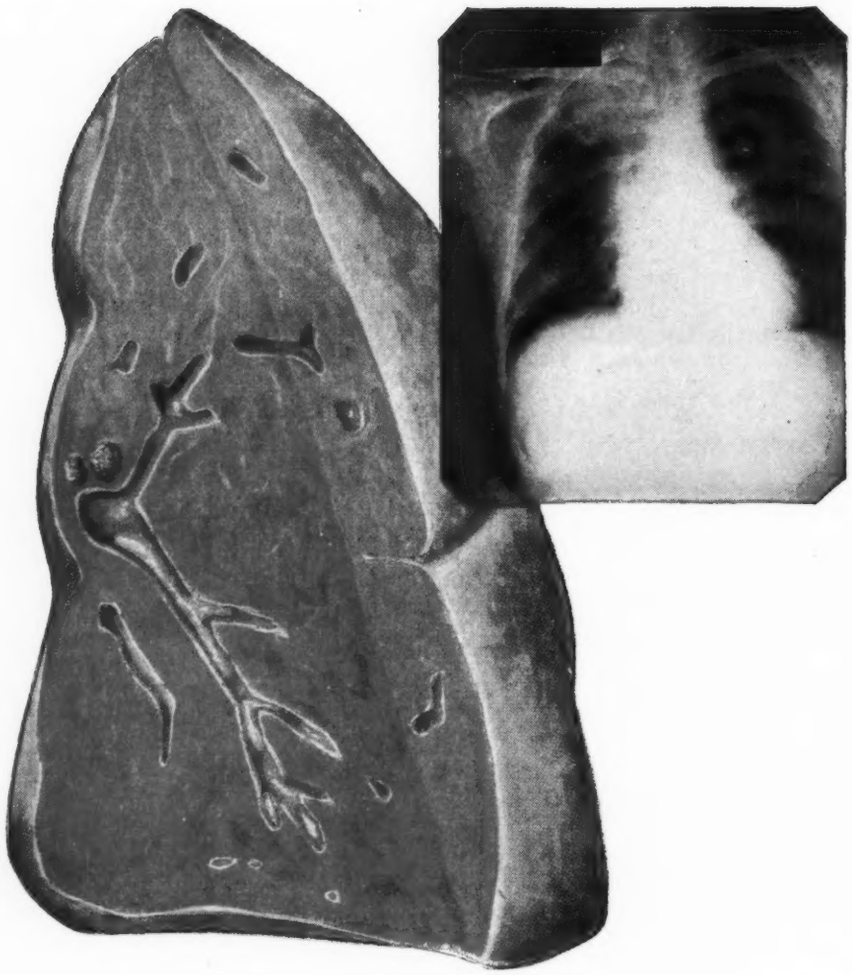

in primary atypical pneumonia:

"It is our clinical impression, supported by the presented data, that terramycin is the drug of choice in the treatment of atypical pneumonia in infants and children."

Graves, F. B., and Ball, W. O.:
J. Pediat. 39:155 (Aug.) 1951

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GRAM-POSITIVE BACTERIAL INFECTIONS

Lobar pneumonia • Mixed bacterial pneumonias
Bacteremia and septicemia
Acute follicular tonsillitis
Septic sore throat • Pharyngitis
Acute and chronic otitis media
Acute bronchitis • Laryngotracheitis
Tracheobronchitis • Sinusitis
Chronic bronchiectasis
Pulmonary infections associated with pancreatic insufficiency
Scarlet fever • Urinary tract infections
Acute and subacute purulent conjunctivitis
Acute catarrhal conjunctivitis
Chronic blepharoconjunctivitis not involving the meibomian gland
Abscesses • Cellulitis
Furunculosis • Impetigo
Infections secondary to Acne vulgaris
Erysipelas • Peritonitis

GRAM-NEGATIVE BACTERIAL INFECTIONS

Gonorrhea • Brucellosis
Bacteremia and septicemia
Friedländer's pneumonia
Mixed bacterial pneumonias
Pertussis • Diffuse bronchopneumonia
Post-partum endometritis • Granuloma inguinale
Dysentery • Urinary tract infections
Respiratory tract infections
Cellulitis • Peritonitis • Tularemia

SPIROCHETAL INFECTIONS

Syphilis • Yaws • Vincent's infection

RICKETTSIAL INFECTIONS

Epidemic typhus • Murine typhus
Scrub typhus • Rickettsialpox
Q fever • Rocky Mountain spotted fever

VIRAL INFECTIONS

Primary atypical pneumonia (virus pneumonia)
Lymphogranuloma venereum • Trachoma

PROTOZOAL INFECTIONS

Amebiasis

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Michigan Foundation for Medical and Health Education, Inc., Sponsors Successful Rural Health Conference

"Court of Public Appraisal" Attracts Wide Interest

Adequate progress is being made in Michigan's Health programs!

This was the verdict of the jury in a court of public appraisal which highlighted the fifth annual Michigan Rural Health Conference at the University of Michigan.

The trial, staged in a realistic manner with Circuit Judge James R. Breakey, Jr., presiding, was witnessed by 250 people. The conference was sponsored by the Michigan Foundation for Medical and Health Education, Inc., with 94 co-sponsors including the University and the Michigan Health Council.

"COURT OF PUBLIC APPRAISAL" IN SESSION

Judge Breakey *(second from left)* and jury *(center rear)* hear testimony of A. C. Furstenberg, M.D., Ann Arbor. *(Right foreground)* L. F. Foster, M.D., Bay City, and J. K. Altland, M.D., Lansing, confer with defense attorney J. Joseph Herbert, as Warren B. Cooksey, M.D., Detroit *(extreme right)* observes.

Under questioning by Defense Attorney J. Joseph Herbert of Manistique, five defendants representing as many areas of responsibility for Michigan's health established these facts:

- The average Michigan citizen lives to be 69, nineteen more years than fifty years ago.
- Eight per cent of Michigan's population does not benefit from a local health department but this is because 12 counties have not voted funds to support such departments.
- Education of medical students has vastly improved. Lectures are now supplemented by bedside training and hours of instruction have more than doubled.
- Improved transportation, better drugs and modern techniques permit one doctor to give more and better care than two doctors in 1930.
- Individual consumers of health are co-operating to the best of their knowledge and ability.
- Voluntary health organizations are seeking more efficiency and have established procedures aimed at preventing the wasting of solicited funds.
- Doctors are not opposed to public health programs and have not attempted to keep down the number of doctors.

Charged with "failing to make adequate progress in discharging their responsibilities to the public," representatives from five major areas of responsibility in health were called to the stand. The jury, picked at random from the registration slips, after hearing the testimony brought in a verdict of "not guilty" after 18 minutes deliberation.

Michigan medicine contributed generously to the success of the conference. Appearing on the two day program were, A. C. Furstenberg, M.D., Ann Arbor, Dean School of Medicine, U. of M., Chairman, E. I. Carr, M.D., Lansing, President Michigan Foundation for Medical and Health Education, Rudolf Noer, M.D., Detroit, Assistant Dean, College of Medicine, Wayne University, John R. Rodger, M.D., Bellaire, Warren B. Cooksey, M.D., Detroit, President United Health and Welfare Fund, L. Fernald Foster, M.D., Bay City, Secretary, MSMS, and J. K. Altland, M.D., Lansing, Michigan Department of Health. Warren R. Mullen, Saline, Michigan, Sr. Student, College of Medicine represented the Medical Student on the program.

The annual Michigan Health Council Awards were presented by John B. Martin, Jr., Grand Rapids, Auditor General, State of Michigan, Chairman Awards Committee and the Banquet Address was presented by Dr. Harlan H. Hatcher, President of the University of Michigan.

More than fifteen County Medical Societies sent delegates. Members of the Woman's Auxiliary to MSMS and the Washtenaw County chapter, served as hostess.

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MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
DETROIT—September 24-25-26, 1952

"That More May Know"---Help Build the Beaumont Memorial

Campaign to Restore Historical Building Begun

The Michigan medical profession has assumed the important task of restoring the American Fur Company store on Mackinac Island—scene of the historical event which gave Dr. William Beaumont the opportunity to discover the action of gastric juices.

It was at the old Fur Company store in 1822 where Alexis St. Martin, a French-Canadian voyageur, was accidentally wounded by the blast of a musket which tore a hole in his side. When the wound healed, it formed a fistula through which the workings of the stomach could be observed.

Doctor Beaumont, a young surgeon serving at Fort Mackinac, treated St. Martin's wound and later conducted experiments on the voyageur with the hole in his side. The discoveries from these studies are rated an outstanding contribution to medical science.

Otto O. Beck, M.D., Birmingham, MSMS President, reveals plans of the Beaumont Memorial Restoration project to members of the Woman's Auxiliary to the Michigan State Medical Society. The MSMS Beaumont Memorial Restoration Committee, in charge of this 1952 program, is headed by A. H. Whittaker, M.D., Detroit.

Pictured conferring *(left to right)* are Mrs. Robert S. Breakey, Lansing, Woman's Auxiliary President; A. H. Whittaker, M.D.; Mrs. Walter S. Stinson, Auxiliary First Vice President; MSMS President Otto O. Beck; and Mrs. William G. Mackersie, Detroit, Auxiliary President-Elect.

Otto O. Beck, M.D., Birmingham, President of the Michigan State Medical Society, launched the campaign to restore the Beaumont Memorial at the annual County Secretaries-Public Relations Conference in Detroit, January 27, 1952.

Doctor Beck stated that the Beaumont Memorial Restoration should be a project supported exclusively by Michigan doctors of medicine and the Woman's Auxiliary to the Michigan State Medical Society. Approximately $40,000 must be raised by personal subscription—to construct the Fur Company store as it originally existed in the early Nineteenth Century.

A letter from Doctor Beck has been sent to every member of the Michigan State Medical Society asking for contributions to make possible this historic shrine to medicine. An attractive brochure on the Beaumont Memorial project, entitled "That More May Know" was enclosed in the letter.

The Woman's Auxiliary is shouldering its share of the campaign with energy. Mrs. Robert S. Breakey, Lansing, enthusiastic and untiring President of the Auxiliary, prepared a second letter which she sent to all Auxiliary members seeking distaff support. The immediate response from the Beck and Breakey letters has been most encouraging.

All of the active direction of the campaign is under the supervision of the Beaumont Memorial Restoration Committee headed by A. H. Whittaker, M.D., Detroit.

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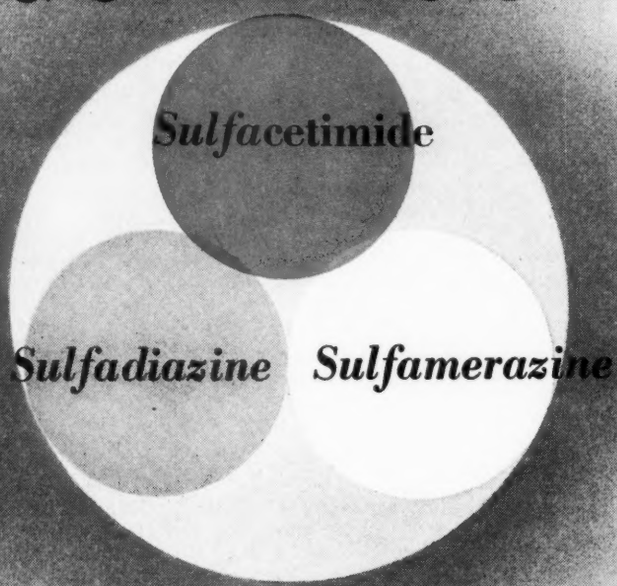

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TRICOMBISUL Tablets, 0.5 Gm. total sulfonamides, each tablet containing 0.166 Gm. of sulfa*cetimide*, sulfadiazine and sulfamerazine.

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At County Medical Societies

Date	Place	Speakers
Dec. 18, 1951	Kalamazoo Kalamazoo Academy of Medicine	R. J. Hubbell, M.D., Kalamazoo Otto O. Beck, M.D., Birmingham L. Fernald Foster, M.D., Bay City D. Hale Brake, Lansing State Treasurer Hugh W. Brenneman, Lansing
Jan. 15, 1952	Grand Rapids Kent County Medical Society	L. Fernald Foster, M.D., Bay City Senator Carlton H. Morris, Kalamazoo Hugh W. Brenneman, Lansing
Jan. 22, 1952	Saginaw Saginaw County Medical Society	L. Fernald Foster, M.D., Bay City J. E. Livesay, M.D., Flint H. B. Zemmer, M.D., Lapeer L. C. Harvie, M.D., Saginaw Hugh W. Brenneman, Lansing
Feb. 5, 1952	Big Rapids Mecosta-Osceola-Lake County Medical Society	L. Fernald Foster, M.D., Bay City Senator Milo A. Johnson, Greenville Hugh W. Brenneman, Lansing
Feb. 12, 1952	Owosso Shiawassee & Clinton County Medical Societies	L. Fernald Foster, M.D., Bay City Senator James M. Teahen, Jr., Owosso Hugh W. Brenneman, Lansing
Feb. 14, 1952	Ann Arbor Washtenaw County Medical Society	L. Fernald Foster, M.D., Bay City Bradley M. Harris, M.D., Ypsilanti D. Hale Brake, Lansing State Treasurer Hugh W. Brenneman, Lansing
Feb. 15, 1952	Muskegon Muskegon County Medical Society	L. Fernald Foster, M.D., Bay City William C. Vandenberg, Lansing Lt. Gov., State of Michigan Hugh W. Brenneman, Lansing
Feb. 19, 1952	Mt. Pleasant Gratiot-Isabella-Clare County Medical Society	L. Fernald Foster, M.D., Bay City Hugh W. Brenneman, Lansing
March 4, 1952	Battle Creek Calhoun County Medical Society	L. Fernald Foster, M.D., Bay City Senator Creighton R. Coleman, Marshall Hugh W. Brenneman, Lansing
March 7, 1952	Holland Ottawa County Medical Society	
March 18, 1952	Port Huron St. Clair & Sanilac County Medical Societies	L. Fernald Foster, M.D., Bay City John A. Martin, Jr., Lansing Auditor-General, State of Michigan Hugh W. Brenneman, Lansing
March 19, 1952	Bay City Bay-Arenac-Iosco County Medical Society	D. Hale Brake, Lansing State Treasurer J. E. Livesay, M.D., Flint Hugh W. Brenneman, Lansing
April 1, 1952	Monroe Monroe County Medical Society	To be announced in April Journal
April 15, 1952	Flint Genesee County Medical Society	To be announced in April Journal
May 7, 1952	Kingsley Inn Oakland County Medical Society	To be announced in April Journal

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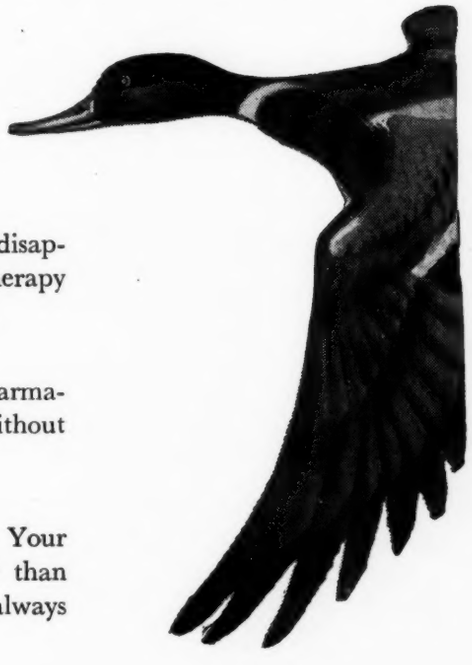

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Most sincerely,

Karl O. Mallard

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President, Mallard, Inc.

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All speakers of the day on the stage at one time.

Here is your chance to ask questions of the day's lecturers and to hear discussed medical matters of value to you in your daily practice.

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at the

Michigan State Medical Society
Annual Session
Sheraton-Cadillac Hotel, Detroit
September 24-25-26, 1952

MSMS SURVEYS CENTRAL CALL-SYSTEMS

Most component County Societies have been exceedingly co-operative in helping the Michigan State Medical Society disseminate information on doctor availability (central call-systems), mediation committees and scholarship funds.

Information on these three topics was gathered by the MSMS Public Relations Department with three questionnaires sent to all secretaries of the county societies. The questionnaires reached the desks of the secretaries the day after the MSMS County Secretaries-Public Relations Conference held in Detroit, January 27. Within the first week, nine (9) County Societies returned the questionnaires to the Executive Offices in Lansing.

These questionnaires were sent out on instructions of The Council. The information contained in the answers on each of the three topics is being compiled and will be used to answer questions posed by reporters and writers for state and national newspapers and other publications.

MSMS RESOLUTION

Matters for Mediation Committee

WHEREAS, it has never been the policy of the medical profession to set specific fees for professional services, but rather to rely on the principle of a fair fee in each individual instance, taking into account the services rendered, the responsibility incurred, the professional skill required, the custom in that locality, but especially the economic status, and ability of the recipient to pay, and

WHEREAS, there has of late developed an increasing violation of these principles among a small but willful minority of the profession, and

WHEREAS, by persistently so doing this small minority is seriously undermining the good will and respect of the general public for the profession as a whole, which through the long past it has been the latter's constant endeavor to develop and maintain; therefore, be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society strongly denounce such practices as are bringing the profession into disrepute; and be it further

RESOLVED: That all component county societies are hereby directed to bring all such willful and persistent impractices to the attention of their respective Committees of Mediation of such matters, for prompt and appropriate action, and to serve notice that if the perpetration of such impractices as reflect on the good name of medicine are persisted in, it may result in suspension of their membership.

This Resolution was adopted by the Michigan State Medical Society House of Delegates at its Annual Session of September 24-25, 1951, in Grand Rapids.

MSMS RESOLUTION

American Medical Education Foundation

WHEREAS, medical school officials estimate that there is an annual deficit of about $10,000,000 in medical school operation in this country, and needed construction at a cost in excess of $300,000,000, and

WHEREAS, many deans and other medical school officials have sought federal aid in this emergency, and

WHEREAS, the American Medical Association has been promoting free enterprise as the ideal system for this country, and

WHEREAS, most doctors of medicine now practicing paid only 20 per cent to 25 per cent of the actual cost of their education, there being a total deficit of some $8,000 to $10,000 per student paid either by private endowment or public aid; therefore, be it

RESOLVED: That this House of Delegates support the program of the American Medical Education Foundation by urging every physician in Michigan to contribute at least $100 per annum to this Foundation for a period of ten years, thus repaying some 10 per cent of the cost of his education; and be it further

RESOLVED: That business organizations, philanthropic trusts and other individuals interested in private enterprise be invited to contribute to the work of the foundation; and be it further

RESOLVED: That attention be called to the fact that this contribution can be earmarked for use by either the University of Michigan Medical School or Wayne University College of Medicine if you so specify.

This Resolution was adopted by the Michigan State Medical Society House of Delegates at its Annual Session of September 24-25, 1951, in Grand Rapids.

Meat and its Important Contribution of Essential Minerals

With the exception of calcium and iodine,[1] meat, as customarily consumed, makes an important contribution to the mineral needs of the American people. Its minerals include those needed in substantial amounts as well as those needed in trace amounts only.

The array of data listed below gives the approximate amounts of essential minerals provided by muscle meat when seven ounces per day are consumed.[1] The minerals include those now known to be essential components of the human organism—the skeletal framework and teeth, soft tissue structures including blood, and substances concerned in regulatory functions.

APPROXIMATE MINERAL CONTENT OF MEATS

200 Gm. (approx. 7 oz.),[1] Edible Portion (Uncooked)

	Beef Round	Lamb Leg	Pork Loin	Veal Shoulder
Minerals, total[2]	2.0 Gm.	1.8 Gm.	1.8 Gm.	2.0 Gm.
Calcium[2]	22 mg.	20 mg.	20 mg.	22 mg.
Chlorine[3]	147 mg.	136 mg.	125 mg.	147 mg.
Copper[3]	0.2 mg.	0.2 mg.	0.2 mg.	0.2 mg.
*Iodine[4] (Ohio animals)	0.02 mg.	0.03 mg.	Data not available	0.01 mg.
Iron[3]	5.8 mg.	5.4 mg.	5.0 mg.	5.8 mg.
Magnesium[3]	46 mg.	42 mg.	39 mg.	46 mg.
Phosphorus[3]	360 mg.	426 mg.	372 mg.	398 mg.
Potassium[3]	661 mg.	610 mg.	559 mg.	661 mg.
Sodium[3]	164 mg.	152 mg.	139 mg.	164 mg.
†Cobalt[5]	0.0002 mg.	———	Data not yet available	———
†Manganese[3]	0.03 mg.	0.03 mg.	0.02 mg.	0.03 mg.
†Zinc[5]	9.4 mg.	———	Data not yet available	———

*Iodine content of meat varies with the iodine content of feed of the animals.
†Needed in trace amounts only.

The average values for iron, phosphorus, and copper of the four kinds of meat shown constitute about 46, 25, and 100 per cent, respectively, of the National Research Council's recommended daily allowances for adults, and the average values for chlorine, potassium, and sodium constitute about 14, 63, and 16 per cent, respectively, of the estimated daily adult needs, as based on mineral balance studies.[6] Although no specific information is available on the quantitative needs for cobalt, magnesium, manganese, and zinc, nutrition information would suggest that the amounts reported above have nutritional importance or significance.

In addition to its notable content of essential minerals, meat also furnishes large amounts of biologically complete protein and important amounts of vitamin B complex, which includes biotin, choline, folic acid, inositol, niacin, pantothenic acid, pyridoxine, riboflavin, thiamine, and vitamin B_{12}. On the basis of its rich contribution of nutritional essentials, meat well deserves its prominent place in the daily diet of the American people, the world's best-nourished people.

1. Recent estimates of the U. S. Department of Agriculture indicate that the per capita consumption of meat in the United States approaches seven ounces per day.
2. Watt, B. K., and Merrill, A. L.: Composition of Foods—Raw, Processed, Prepared, In Agriculture Handbook No. 8, United States Department of Agriculture, 1950.
3. Estimated on basis of protein content of meats. Sherman, H. C.: Food Products, ed. 4, New York, The Macmillan Company, 1948, p. 155.
4. Ohio animals; varies with iodine content of feed. Johnson, H. J.: Bridges' Dietetics for the Clinician, ed. 5, Philadelphia, Lea & Febiger, 1949, p. 800.
5. Mitteldorf, A. J., and Landon, D. O.: Analytical Chemistry; Spectrochemical Analysis of Beef for Mineral-Element Content, Armour Research Foundation of Illinois Institute of Technology. In Press.
6. Dauphinee, J. A.: Sodium, Potassium, and Chloride Malnutrition, Including Water Balance and Shock, in Jolliffe, N.; Tisdall, F. F., and Cannon, P. R.: Clinical Nutrition, New York, Paul B. Hoeber, Inc., 1950, p. 341.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

ACCEPTED COUNCIL ON FOODS AND NUTRITION AMERICAN MEDICAL ASSOCIATION

American Meat Institute

Main Office, Chicago...Members Throughout the United States

Say you saw it in the Journal of the Michigan State Medical Society

MSMS RESOLUTION

Fluoridation of Water

WHEREAS, controlled experiments in several cities in the United States present acceptable evidence that the ingestion of small and carefully controlled amounts of fluorides during the period of tooth enamel formation substantially reduces the incidence of dental caries, without apparent deleterious effect, and

WHEREAS, the fluoridation of water is an effective approach to improving health through the prevention of dental decay, and is economically advantageous to the public as well as the individual, and

WHEREAS, the fluoridation of public water supplies is endorsed by the American Public Health Association, United States Public Health Service, American Dental Association, Michigan State Dental Society, in the interest of better health, and

WHEREAS, many Michigan communities still have not applied this health safeguard to their water supplies for the benefit of their citizens; now, therefore, be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society endorse a carefully controlled and supervised process of fluoridation of communal water supplies for the prevention of dental caries; and be it further

RESOLVED: That a copy of this resolution be sent to every county medical society, the State Health Officer, and every local health officer in Michigan.

This Resolution was adopted by the Michigan State Medical Society House of Delegates at its Annual Session of September 24-25, 1951, in Grand Rapids.

CONTINUATION COURSE

On April 3, 4, and 5, 1952, the Frank E. Bunts Institute and the Cleveland Clinic Foundation will present a continuation course for physicians on *"The Diagnosis and Treatment of Malignant Disease."* Dr. Freddy Homburger, Research Professor of Medicine, Tufts College Medical School, Boston, will give the evening lecture on April 4. The other guest speakers will be Dr. Allan C. Barnes, Professor of Obstetrics and Gynecology and Chairman of the Department, Ohio State University College of Medicine; Dr. Brown M. Dobyns, Associate Professor of Surgery, Western Reserve University School of Medicine, Cleveland; and Dr. Thomas D. Kinney, Director of Laboratories, Cleveland City Hospital, and Professor of Pathology, Western Reserve University School of Medicine, Cleveland.

Inquiries regarding the complete program and registration may be addressed to the Frank E. Bunts Educational Institute, 2020 East Ninety-third Street, Cleveland 6, Ohio.

THE COST OF SICKNESS

Medical societies all over the nation report that the majority of complaints reaching grievance committees involve medical costs. To reduce such complaints, encourage physicians to: (a) discuss fees in advance with patients, (b) explain "those other medical bills" submitted by specialists and medical assistants, (c) itemize bills, (d) help patients budget for long-term medical care, (e) practice good PR in medical bill-collecting, (f) publicize the idea that medical care is available to all regardless of ability to pay, and (g) promote voluntary health insurance.

State and local medical societies need to police their own ranks and take disciplinary action against members guilty of unprofessional and unethical conduct. It's that one bad apple in the barrel that causes complaint. The medical profession prides itself on its high ethical standards and its dedication to serving humanity. It cannot afford to shelter the not-so-ethical man. Also, physicians who constantly over-charge should be firmly dealt with by their medical societies. Disciplinary action, when justified, strengthens the position of the profession in the eyes of the people.

Many a gripe is aimed at the doctor, and it's only justice that he occasionally have an opportunity to spout his own kicks about thoughtless or ornery patients who cause needless trouble and waste his time and energy. The *Saturday Evening Post* gave Dr. Robert K. Webster, Brazil, Indiana, just such an opportunity in a November 17, 1951, article called "I'm a Doctor—and I'm Human!" The Indiana physician points out that such patients are in the minority and offers some suggestions on how to be a good patient. The *Post* article and a piece entitled, "If Your Child is a Problem Eater," which appeared in the November issue of *Today's Woman,* are recommended reading.

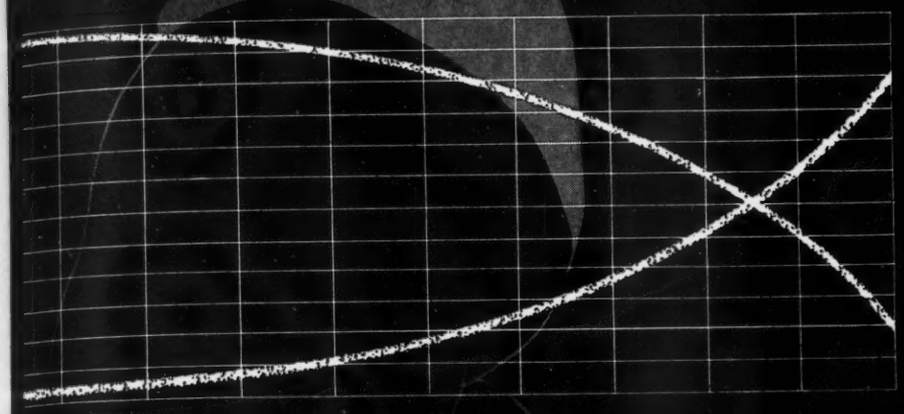
THE AMERICAN MEDICAL EDUCATION FOUNDATION

The 1952 campaign for funds on behalf of the American Medical Education Foundation will be held from April 15 to June 30.

The foundation's first year ended December 31 with more than 1,800 individual physicians contributing a total of $745,917.84. In addition, thirty-three organizations and thirty-three lay persons made contributions. These results, officers explained, may be considered quite satisfactory for a new undertaking of the magnitude of the foundation.

The AMA Board of Trustees has contributed

(Continued on Page 284)



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AMERICAN MEDICAL EDUCATION FOUNDATION

(Continued from Page 282)

another half million dollars to serve as a nucleus for the 1952 campaign. This brings to one million dollars the AMA contributions since the foundation was started a year ago. The AMA also is underwriting all the expenses of the foundation so that every dollar contributed can be passed on to the medical schools for their unrestricted use.

Under a new policy, adopted for 1952, alumni or friends of a medical school can make a contribution to a specific medical school through the foundation and the school will receive the full amount of the contribution, plus its full share of unearmarked funds.

The first distribution of funds to the medical schools was made in July, 1951. The balance of the funds raised during 1951 are now being sent to the medical schools through the National Fund for Medical Education.

THE AMA AND SENATE BILL 1149

This bill, which is intended primarily to effect the medical recommendations of the Hoover Commission on Organization of the Executive Branch of the Government, would provide for the transfer of various federal medical services to a new Department of Health.

The Hoover Commission's report in this regard was presented in March, 1949, based on reports received from its Medical Task Force in January and February of 1949. Although the report did recommend, in part, the program proposed by S. 1140, the basic or primary recommendations of the Commission were (a) that the Congress clearly define the beneficiaries entitled to medical care from the federal government and the relative priorities and such beneficiaries, and (b) that the present inconsistencies in the federal hospital construction program be resolved.

The Task Force, in conducting the studies prior to the issuance of its report, found that the existing federal medical program was "devoid of any central plan" and concluded that there must be overall planning, which would require "first a clear definition of the extent of the responsibilities, and second an organization appropriate to carry out the commitment."

Despite the fact that the American Medical Association is in favor of the establishment of a Department of Health and is in whole-hearted accord with the desire to effect economy in the operation of federal medical services, it is the belief of the Association that S. 1140 will not accomplish the desired results.—WALTER B. MARTIN, M.D., Trustee AMA.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1952

Spring	MSMS Postgraduate Extramural Courses State-wide
April 3	Jackson County Medical Society's Clinic Day .....Jackson
April 9	Genesee County Medical Society's Cancer Day .....Flint
May 1	Ingham County Medical Society's Clinic Day .....Lansing
May 7	Third Michigan Industrial Health Day Flint
May 14	Wayne University Medical Alumni Clinic Day and Reunion.....Detroit
June 9-13	AMA Annual Session.....Chicago
June 27-28	Upper Peninsula Medical Society Annual Meeting.....Iron Mountain
June	St. Clair County Medical Society Clinic Day.....St. Clair
July 24-25	Annual Coller-Penberthy Medical Surgical Conference.....Traverse City
July 24-26	Conference on Housing and Living Arrangements for Older People....Ann Arbor
August	Third Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Michigan Society of North Central Counties Grayling
Sept. 24-26	MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION.....Detroit
Oct. 8	Clara Elizabeth Fund—Genesee County Medical Society—Lectures of 1952...Flint
Oct. 9	Fourth Michigan Cancer Conference Kellogg Center, East Lansing
October or November	American Academy of General Practice of Wayne County.....Detroit
Autumn	MSMS Postgraduate Extramural Courses State-wide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

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MSMS County Secretaries-Public Relations Conference Breaks Attendance Record

Arch Walls, M.D., Detroit, Chairman of the MSMS Public Relations Committee, welcomed 191 registrants at the 1952 County Secretaries-Public Relations Conference, held at the Sheraton-Cadillac Hotel, Detroit, on January 27.

The morning session was devoted to FORMULA FOR FREEDOM, a PR project: "Why Formula is Valuable to Medicine," William Bromme, M.D., Detroit, Chairman MSMS Council; "How Formula is Applied"—a panel.

Members of the panel were: Press—C. L. Weston, M.D., Owosso; Radio—C. A. Payne, M.D., Grand Rapids; Cinema—A. E. Schiller, M.D., Detroit; Publications—K. H. Johnson, M.D., Lansing; Speakers—G. E. Millard, M.D., Detroit; Education—H. J. Meier, M.D., Coldwater. J. E. Livesay, M.D., Flint, conducted the question and answer period after the panel presentations.

Joseph Hainline, newscaster for Radio Station WJR, Detroit, opened the presentation at one end of the Ballroom with a simulated news broadcast on "The Formula Works." Following his speech, the audience was instructed by Chairman Arch Walls, M.D., Detroit, to turn its chairs one-quarter turn to the right. This move faced the seats to the side of the Ballroom where William Bromme, M.D., Detroit, Chairman of the MSMS Council, was located to deliver a short talk, "Why the Formula is Valuable to Medicine."

The next quarter turn of seats brought the audience around to the rear of the Ballroom. The latecomers now occupied front-row seats to listen to a panel discussion by media chairmen of the Public Relations Committee on "How the Formula Is Applied."

Otto O. Beck, M.D., Birmingham, MSMS President, spoke at the noon-day meeting on "The Beaumont Memorial Restoration—Our Responsibility."

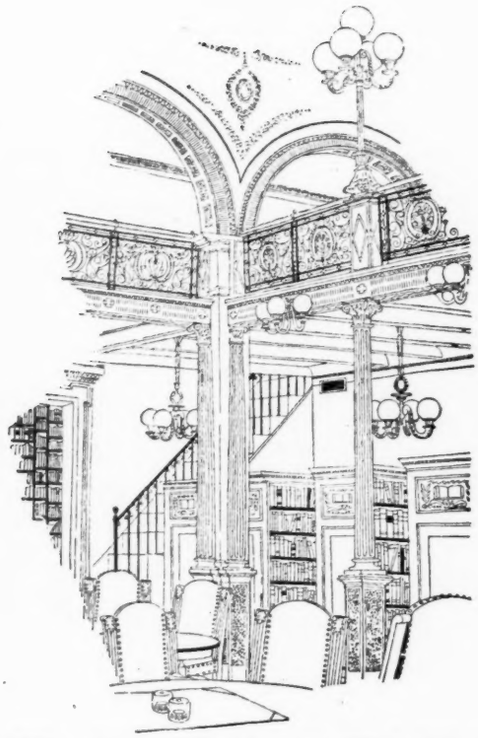
In the afternoon, E. H. Fenton, M.D., Detroit, Chairman of County Society Secretaries during the past year, introduced J. Joseph Herbert, LL.B., Manistique, MSMS Legal Counsel. Mr. Herbert's subject was "What You Should Know About the Medical Practice Act and the Basic Science Act." L. Fernald Foster, M.D., Bay City, MSMS Secretary, presented "MSMS Techniques—and Why."

Formula for Freedom being discussed on January 27 in Detroit by MSMS President Otto O. Beck, M.D., Birmingham; Arch Walls, M.D., Detroit, Chairman MSMS Public Relations Committee, and L. Fernald Foster, M.D., Bay City, MSMS Secretary.

John A. White, M.D., Big Rapids, was elected Chairman of the Secretaries for the year 1951-52.

The 191 attendants were representative of the following groups:

County Secretaries—J. E. Mahan, M.D., Allegan (Allegan); W. R. Birk, M.D., Hastings, (Barry); P. J. Slosser, M.D., Tekonsha (Branch); T. B. Mackie, M.D., Sault Ste. Marie (Chippewa-Mackinac); N. L. Lindquist, M.D., Escanaba (Delta-Schoolcraft); E. P. Griffin, Jr., M.D., Flint (Genesee); C. H. Wallman, M.D., Alma (Gratiot-Isabella-Clare); A. J. Stein, M.D., Hillsdale (Hillsdale); J. L. Isbister, M.D., Lansing (Ingham); R. E. Rice, M.D., Greenville (Ionia-Montcalm); H. W. Porter, M.D., Jackson (Jackson); H. G. Benjamin, M.D., Grand Rapids (Kent); R. A. Biggs, M.D., North Branch (Lapeer); R. M. Duffy, M.D., Pinckney (Livingston); J. H. Jewell, M.D., Roseville (Macomb); B. E. Henig, M.D., Grayling (North Central); W. M. LeFevre, M.D., Muskegon (Muskegon); G. A. Drake, M.D., Petoskey (Northern Michigan); A. R. Young, M.D., Pontiac (Oakland); W. F. Strong, M.D., Ontonagon (Ontonagon); F. W. DeYoung, M.D., Spring Lake (Ottawa); Robert Bucklin, M.D., Saginaw (Saginaw); E. W. Blanchard, M.D., Deckerville (Sanilac); R. C. Brown, M.D., Owosso (Shiawassee); T. H. Bottomley, M.D.,



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(Continued from Page 286)

Port Huron (St. Clair); John P. Sheldon, M.D., Sturgis (St. Joseph); E. H. Fenton, M.D., Detroit (Wayne); and G. C. Tornberg, M.D., Cadillac (Wexford-Missaukee).

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Others Present—Capt. L. A. Potter, Michigan Department of Health; J. Joseph Herbert, MSMS General Counsel; E. H. Wiard, Michigan Health Council; J. C. Ketchum, J. W. Castellucci, Verne Collett, L. H. Freye, L. G. Goodrich, H. S. Hosmer, P. E. Klein and Neal L. McCue of Michigan Medical Service; W. H. Byrne; Miss Charlotte Ash, Mrs. T. E. Bachman, Miss Cary Guthaus, Miss Helen V. Hawkins, Miss Freda Heidelberger, Miss Doris E. Jarrad, Miss Patricia Kaczmarck, Miss Margaret Schultz, Miss Margaret E. Thompson and Miss Harriet A. Wahl of Michigan State Medical Assistants Society, and Mary Rose Wolfe.

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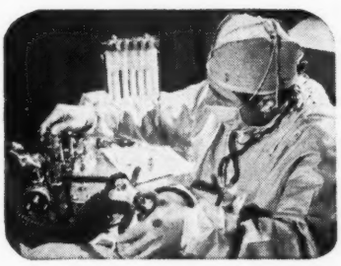

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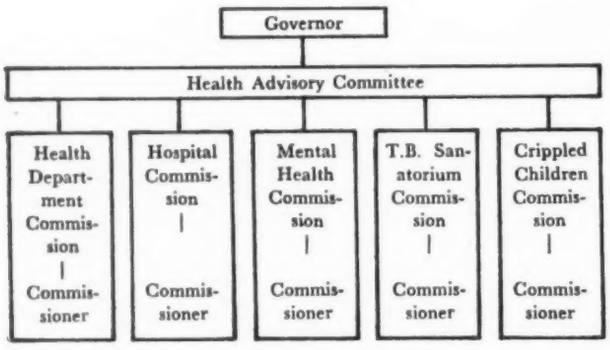
Summary of Plan of Reorganization of the Health Functions of the State of Michigan

I. Administrative Plan

1. The need for co-ordination in the health functions of state government is recognized. We recommend that the five major branches of government health functions be retained as separate entities—The Health Department, The Mental Health Department, The Tuberculosis Sanatorium Division, The Crippled Children Commission and the Office of Hospital Survey and Construction. We recommend that all five branches be served by its commission with policy making powers. Further, we recommend that an over-all advisory committee be established to be composed of one member from each of the five commissions and the chairman to be designated from their group by the Governor. This over-all commission shall be advisory to the Governor on all health matters and meet regularly to co-ordinate all health functions. However, budget plans should remain the prerogative of each health division and should be handled as at present. In graphic form our recommendation is this:



(2) We recommend that the present advisory body to the health department be abolished and that a seven member commission be appointed by the Governor to serve seven-year overlapping terms. This commission should be given statutory powers of supervision and control. It should contain at least four doctors of medicine. Its functions should include the appointment of the health commissioner who would serve at the pleasure of the Commission.

(3) In similar fashion, we recommend that the other four commissions—namely, Mental Health, the TB Sanatorium Commission, the Crippled Children Commission and the Commission on Hospital survey and construction be given statutory powers of administration and control if lacking and that present powers be augmented, if needed, to give uniformity of control to all five commissions serving the major divisions of health functions. In short, we urge that the present Commissions be retained and their powers augmented if needed.

II. Some Specific Recommendations

1. That state law provide that the Health Commissioner must be a person with an M.D. degree and an M.P.H. degree with at least five years of demonstrated successful experience in public health administration.

2. That staff members of local or state health agencies not be permitted to serve on the various commissions.

3. That the State Health Department should include its present functions and in addition add to its duties the licensing of maternity homes, the sanitation services of the Department of Agriculture relating to human health, and the sanitation services of the Liquor Commission relating to human health.

4. That primary consideration be given the problem of raising the quality of personnel in State Hospitals and in filling present vacancies with qualified personnel. Realistic consideration should be given to salaries necessary to attract competent professional staff to State Hospitals and other health posts in State Government.

5. That present statutes be reviewed and changed where necessary to accomplish co-ordination of functions and lines of authority and supervision consistent with the administrative plan as outlined above.

III. Amalgamation Not Approved

We do not approve a proposed amalgamation of all the licensing boards in the health field.

JACKSON E. LIVESAY, M.D., *Chairman*
Special Committee (MSMS) to Study
Report of "Little Hoover Commission"

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1. Hutcheson, J. M.: Management of Cardiac Failure. *Virginia Med. Monthly*, 74:458, Oct., 1947.
2. Noth, P. H.: Pick's Disease: A Record of Eight Years' Treatment with Salyrgan, Ammonium Nitrate, and Abdominal Paracentesis. *Proc. Staff Meet. Mayo Clin.*, 12:513, Aug. 18, 1937.

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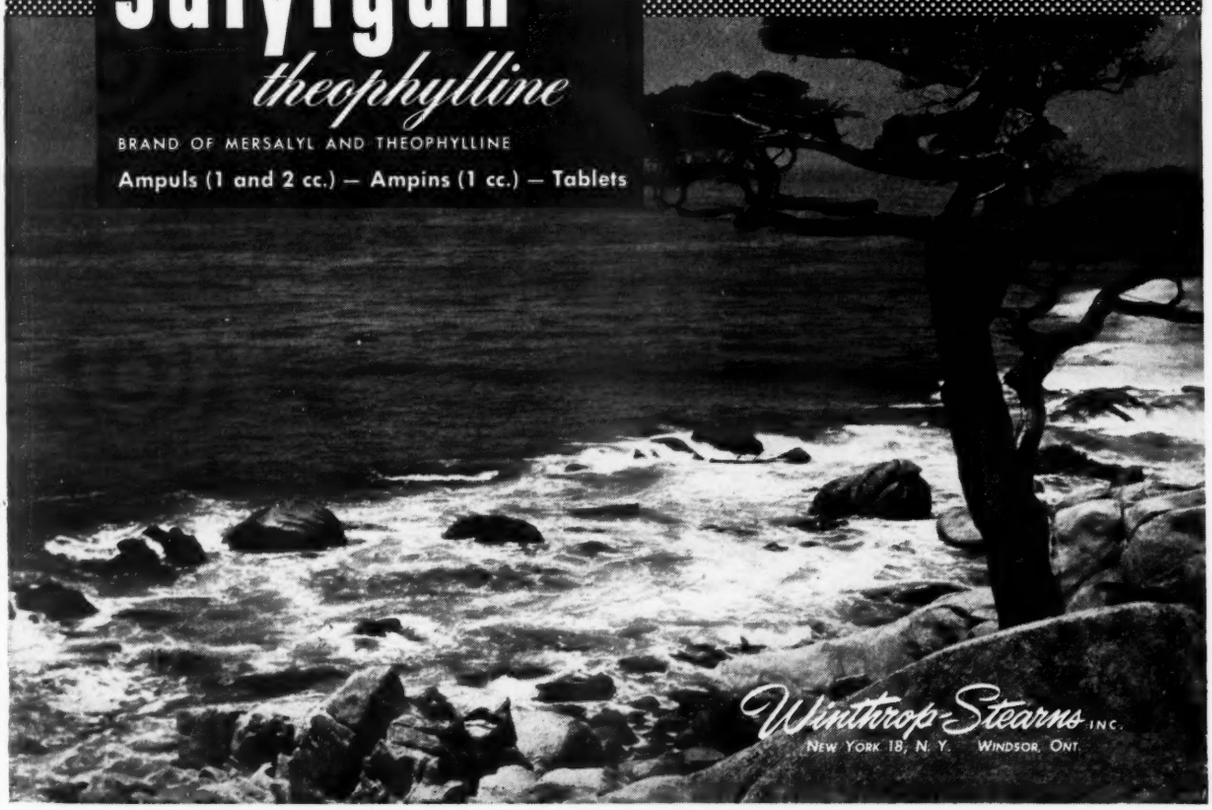

Cancer Comment

MISCONCEPTIONS ABOUT UTERINE CANCER

Roger B. Scott, M.D., and James W. Reagan, M.D., of Western Reserve University School of Medicine, Cleveland, Ohio, in *GP* (December, 1951 issue) have called attention to some of the more common misconceptions about uterine cancer that have resulted in improper or delayed diagnostic or treatment procedures. Some of the more important of these, together with an abstract of the authors' discussion, are listed herewith:

1. *"Profuse, prolonged, or intermenstrual bleeding at the menopause has no special significance and will correct itself."*—Such symptoms demand a careful pelvic examination with uterine curettage, if necessary, to establish the cause of the condition. Hormones should never be given without careful pelvic examination. Abnormal uterine bleeding of any type is not a characteristic of the menopause and should be considered organic until otherwise proved.

2. *"Patients below the age of thirty with abnormal uterine bleeding may safely be kept under observation for a period of time before proceeding with diagnostic studies."*—The authors point out that the average age of patients with carcinoma *in situ* of the cervix is thirty-five to thirty-eight years, while the average age for invasive carcinoma of this organ is ten years older. They conclude that while youth is a relative blessing, it is no guarantee against the ravages of cancer.

3. *"Visualization and palpation of the cervix is sufficient to rule out cancer of this organ."*—Continued experience with the Papanicolaou smear method has shown its value in early diagnosis of cervical cancer. Confirmed by biopsy, the disease can be diagnosed in an early stage when absolute cures should approach 100 per cent. Neither visualization nor palpation can detect cancer as early as can cell smears and biopsy. A cervix may be symptomless and still contain a cancer.

4. *"A cervix which is cauterized and does not heal should be suspected of containing a carcinoma and appropriate measures then instituted to rule out the condition."*—If a cervix is so unhealthy as to demand cauterization, the presence or absence of cancer as the cause of the diseased tissue should be established by proper procedures of Papanicolaou smears and biopsy *before* rather than *after* cauterization.

5. *"A cervical biopsy during pregnancy is dangerous."*—Clinical experiences have shown this idea to be misleading. The danger of excessive hemorrhage has been overstressed. The authors issue a word of warning when examining slides of cervical tissue during pregnancy not to be misled by changes that may mimic carcinoma *in situ* and which will disappear postpartum. When there is definite evidence of invasion, treatment should be postponed until the pregnancy is concluded.

6. *"A diagnostic curettage of the uterus is dangerous, for it might disseminate malignant tissue."*—The danger of forcing tumor cells into vascular and lymphatic channels seems scarcely likely as the flow of such channels is into rather than away from the curetted uterine surface. Clinical or experimental evidence is lacking that excision of a malignant tumor by a wide margin or that uterine curettage can force tumor cells into nearby veins or lymphatics. When local or distant metastases occur after excision, it is more reasonable to assume that they had taken place prior to such procedures.

7. *"Radiation treatment of cancer of the cervix is passé and surgery is the treatment of choice."*—The authors supply the following table of five-year results of irradiation treatment of cervical cancer:

League of Nations—Stage	0 —100 per cent
League of Nations—Stage	I —55 to 80 per cent
League of Nations—Stage	II —30 to 45 per cent
League of Nations—Stage	III —15 to 25 per cent
League of Nations—Stage	IV — 0 to 5 per cent

The authors state that it is doubtful that results in radiation therapy will ever be much better than those given. They also feel that at least some of the widely publicized results of surgical treatment of cervical cancer are due to improved anesthesia, frequent transfusions, antibiotics, et cetera. More time is necessary to properly evaluate these surgical measures.

8. *"It is unsound to irradiate an organ and then remove it."*—It is argued that the cancer cells of the cervix can be killed by radiation, but doses

(Continued on Page 356)

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Civil Defense is Self Help

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ONE HUNDRED THOUSAND injured—*now!* Take care of them.

This, in a nutshell, summarizes the basic problem confronting the medical profession in the atomic bombing of a potential target area in the State of Michigan.

In any large-scale disaster a prime consideration is professional care, the help that injured people need and expect. When one contemplates a problem of such huge statistical proportions, it becomes immediately obvious that a great deal of prior organizing and planning must be done if the situation is to be handled with any adequacy. It is essential that the application of medical care be not haphazard but, rather, carefully thought out. However, before medical care can be given with some measure of efficiency, it must be engrafted upon a sound and functional organization.

The responsibility of the medical profession in large-scale disaster is tremendous. If the individual physician would take time to think about the problem and study it, he would very shortly become aware of the complexity of the situation which faces Medicine. He will be forced to the conclusion that the only way his profession can approach the challenge of its responsibility is, first, by all physicians recognizing their important role; second, by united action on the part of all physicians; and third, by their active and interested cooperation.

He will realize that physicians individually cannot begin to meet the manifold duties involved in any worthwhile solution of the problem. He will appreciate that aside from his own participation in any organization, successful solution depends upon the development, with the assistance of allied professional groups, of teams and units and upon the training of thousands upon thousands of nonprofessional volunteers.

The keynote in Civil Defense is self-help.

It would then follow that the physician must be the leading figure in the development of this philosophy. If the citizens in our communities can be taught self-help, the physician will be better able to meet his responsibility to them. Those who have thoroughly studied the problem for a long period of time have had to reason in just this fashion.

In the Wayne County Medical Society, the Committee on Civil Defense and Disaster recognized early that a definite plan was needed in order that the physician's part in Civil Defense could be defined. The details of this plan were reported in this JOURNAL in March, 1951. Basically there has been very little alteration. In close co-operation with the Detroit Office of Civil Defense and the Detroit Department of Health, the Society is attempting to make the plan an actuality rather than a paper exercise. Many of our members have assumed positions of great responsibility in the development of the various units and have given generously of their time and effort as evidence of their seriousness of purpose.

It soon became apparent that uniformity in professional care was absolutely necessary if any degree of completeness and efficiency in treatment were to be achieved. This necessity has been recognized by many of the major county medical societies throughout our country. It is, perhaps, unfortunate that these groups have had to work independently in developing their uniform treatment

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programs. But this was essential because of the relative absence of any functional policy, of which we were aware, being laid down at a national or state level. It was felt the lack of a single plan in no way mitigated our responsibility for the development of this important program. The Committee on Civil Defense and Disaster of the Wayne County Medical Society appointed two subcommittees, working closely together, to study the problam of developing 'standard operating procedures.' The results of their efiorts are detailed in the papers to follow.

The subcommittee on uniform medical treatment is under the chairmanship of Dr. Richard M. McKean. Dr. Rudolf J. Noer is chairman of the subcommittee on uniform surgical treatment. It is felt that their efforts and those of their colleagues are worthy of the highest commendation.

In preparing their reports, the members of the subcommittees kept two things in mind. One was the emergency aspects of the particular subject, and the other was the applicability of the material to everyday medical practice. While we do not all work in the same fields, it is incumbent upon each of us to brush up on those procedures with which we were once familiar.

In recognition of the need for uniform treatment procedures and of their professional value, the editor of THE JOURNAL requested the Committee of Civil Defense and Disaster of the Wayne County Medical Society to submit its report for publication in a special issue. It is a pleasure to comply with this request because it is desired to share the results of our efforts with all physicians throughout the state. Further, it is hoped that these articles will stimulate interest in the necessity for Civil Defense. It is planned to reprint the reports in the form of a brochure for wide distribution among professional groups.

It is our fervent hope that through reading these articles the physicians in the State of Michigan will more fully realize the scope of the responsibility which has been thrust upon them. We feel that philosophical discussions concerning the pros and cons of the possibility of atomic attack on our country should not deter us in preparing to do our part in Civil Defense. We know that our potential enemy is in possession of the weapon. We like to think that our country is the most peace-loving and enlightened nation in the world. We know that our leaders were faced with the awful question regarding the use of this terrible weapon against defenseless people, and they made a hard decision. Hiroshima and Nagasaki testify to that. If we found it so difficult to decide to use this weapon to achieve peace, is it to be supposed that our potential enemy will find it more difficult to use it to achieve conquest? If we recall our impressions of the character of our potential enemy, then the answer must be no. He will obviously have no compunction in using the atom bomb against our cities when it suits his purpose. Let us look at the problem in that simple manner and go forward with our planning. Let us, as physicians, recognize our grave responsibility in this potentiality and prepare to meet it. Let us make our people aware of our activity so that they may derive some comfort from the fact that we are not going to let them down. Finally, let us pray that it never happens.

Remember, one hundred thousand injured—*now!*

MSMS

LEHMAN SENATE BILL 2337—NEW EMIC

The Lehman bill consists of three titles. Title I provides for a Federal-State program of emergency maternity and infant care for the wives and infants of enlisted members of the Armed Forces. Hospital, medical, nursing, and related services in connection with pregnancy and childbirth would be provided for the wife of any enlisted member of the Armed Forces, Lehman stated in opening the hearings. Similar services would be available for all children of enlisted members of the Armed Forces who were under five years of age.

Title II goes a great deal further than Title I, for it would institute a system of Government-financed hospitalization for all dependents of enlisted men. The bill authorizes provision to these dependents of such hospital services as: "bed and board and such nursing services, laboratory services, ambulances, use of operating room, staff services, and other services, drugs and appliances as are customarily furnished by a hospital to its bed patients either through its own employes or through persons with whom it has made arrangements for such services, drugs or appliances."

This cryptic language authorizes use of Federal funds to purchase service-benefit insurance. — MARJORIE SHEARON, Challenge to Socialism, March 13, 1952.

The Development of a Program for Uniform Medical and Surgical Care in Disaster

By Richard M. McKean, M.D., and Rudolf J. Noer, M.D.

Detroit, Michigan

JOINT SUBCOMMITTEES on uniform medical and surgical care were formed, something under a year ago, to function under the Committee on Civil Defense and Disaster. Since then the members have been engaged in surveying the various facets of the situation with a view to concise presentation of practical solutions for problems which may arise in various fields. The papers which follow represent the current thinking of the committees in the areas considered. While some of them deal directly with factors peculiar to an attack with atomic weapons, it is important to remember that most injuries to be faced in any disaster are, in fact, problems confronting the doctor in his everyday contact with individual patients and their own personal "emergencies." This holds true even in that portion of the symposium which deals by title with "radiation injury" *per se*. In this light the material presented herewith seems peculiarly timely in our era when disaster seems persistently "just around the corner." We refer not alone to that seemingly nebulous and ephemeral "atomic attack" but to such emergencies as the Texas City explosion, the Kansas City area floods and other similar disasters.

Much of this material has been presented in various places and publications heretofore. There is a certain amount of unavoidable overlap between the various articles; it is felt that this is perhaps as much of an advantage as a disadvantage. Certain matters that are still the subject of active investigation have been deliberately omitted or sketchedly considered. We refer especially to certain phases of injuries to the endocrine system, particularly the anterior pituitary, the adrenal cortex and the gonads. The use of ACTH and cortisone and the results of their further study may well alter some of the concepts outlined in the present papers. For instance, there are some indications that the use of newer methods of therapy may alter the amount of irradiation which constitutes lethal dosage. The committee members are aware of their responsibility for keeping abreast of progress in their fields, and subsequent revisions of this material will be presented. We hold no brief for these methods as being necessarily better than others; they represent simply an attempt to present practical approaches to the problems involved. Longer study and protracted editorial effort might have produced a more cohesive effort, but the urgency of the situation made it appear of first importance that the material be presented at the earliest possible date. The committees welcome all suggestions as to how the presentation might be improved upon.

It must be remembered that a major catastrophe would require the ultimate in versatility and individual initiative. In an urban area such as ours, a considerable number of physicians who have practiced one specialty or another for many years might suddenly be forced to care for large numbers of patients whose injuries or illnesses lie in fields with which they have had little contact for many years. In such a time the general practitioner may well be the most effective of all physicians. We shall all have to be general practitioners in every sense of the word, treating all types of illness and injury as we meet them, with little or nothing to work with except our minds, hands and hearts. With this in mind only the barest essentials of emergency and early definitive treatment are considered. No attempt has been made to provide any sort of complete coverage of any given situation. Our aim has been to provide only a brief working outline. It is hoped that a few days will see a return to some semblance of order in the distribution of patients and physicians. Fortunately the more strictly surgical emergencies are matters of particular concern in the first ten days, whereas the important effects of radiation injury will not put in their appearance until the second week.

All our attention must be focused upon the dictum of "first things first." Proper priorities in treatment will be of paramount importance if the efforts of the comparatively few medical men are not to be needlessly dissipated at great cost of life and limb. It has been said that there are only two real emergencies: asphyxia and hemorrhage. Failure adequately to correct either of these in a mat-

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ter of minutes may well mean death of the patient. Other emergencies allow more time for care, varying in degree according to their nature. A heavy responsibility will rest upon each and every one of us who survives the catastrophe to decide carefully but promptly which patients require treatment first, and which of each patient's several injuries demand first attention. Some attempt has been made to indicate priorities in need for more definitive care at expert hands, but the extremely varying situations which will be found on first approach to mass casualties precludes any attempt at priority indication for the initial emergencies. This responsibility will inevitably fall upon the shoulders of the physician who first sees the patients; he will be forced to make his decisions in the light of common sense and past medical background and experience. One additional word of caution must be added, macabre though it is: time must not be wasted upon those already clearly beyond hope of survival. None of us who remain will be able to care for all he would wish to treat, because the very number of casualties will be overwhelming. Therefore we must proceed on the basis of "the greatest good to the greatest number"—wasting our precious minutes neither on those too slightly wounded to need skilled help, nor yet on those for whom such help can be of no avail. Contrary though this is to our entire tradition of succor for all who need or ask it, we must nevertheless steel ourselves to follow the course which will provide aid to the greatest possible number of those for whom proper care may mean the difference between life and death.

This collection of papers is presented with the fervent hope that they may never be needed for the purpose for which they have been prepared. Should the fatal event occur, however, it is our hope that it may provide a ready and quickly available source of first reference for all who need such help.

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VA INCREASES COLLECTIONS ON NON-SERVICE-CONNECTED CASES

Although still having trouble making collections, Veterans Administration reports it obtained $1,213,251 from outside sources for treatment of hospitalized non-service-connected cases in the last six months of 1951. This is almost as much as was collected on these accounts in the previous twelve months.

A Psychiatric Viewpoint on Civil Defense

By Peter A. Martin, M.D.
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PSYCHIATRIC PREPARATION of the individual physician for participation in Civil Defense involves a twofold responsibility. The physician must not only be adequately trained to be able to care for psychiatric casualties during the emergency period, but, like all other individuals residing in the possible bombing area, he must be emotionally prepared himself to be able to withstand the shattering effects of actual atomic bombing.

The writer has no illusion that such a Herculean task could even be approximated by any written communication. But it will be the dual aim of this paper to present a psychiatric viewpoint of the basic principles involved in the emotional preparation of the individual for atomic bombing as well as the basic principles underlying the care of the emotionally disturbed patient resulting from atomic bombing of Civil Defense areas.

Every physician, no matter which branch of medicine he practices, may be called upon to treat psychiatric casualties because of the dangers of panic following atomic bombing. The most serious emotional problem for which the individual must be prepared is that of panic. It is a serious problem because many avoidable injuries and deaths, as well as disruptive mass reactions, may be caused by panic following the bombing. Panic may produce more casualties than nuclear radiation. Panic would add greatly to the burden of caring for casualties resulting solely from the physical destruction.

It is important now to define our terms. The word "panic" is commonly used to describe different phenomena. A differentiation will be made here between individual panic and group panic.

Group panic can best be defined by an illustration. At the Iroquois Theatre fire in Chicago in 1903, the victims followed the crowd to a few exits with the result that many were crushed to death despite the fact that actual fire damage was small. This is an example of mass panic—a disruptive group reaction. Imitative, uncritical behavior with

a strong response to suggestion and rumor play important etiological roles in such reactions.

Mass panic is a serious danger following atomic bombing or other large scale disaster. But it will not be within the scope of this paper to deal with the problem of disruptive group reactions. The handling of mass panic will not be the responsibility of physicians. Our concern here is with the preparation of the individual for, and with the treatment of the individual after, atomic bombing. The emphasis will be upon the problem of individual panic.

Individual panic will be used here to denote that extreme degree of anxiety in which the individual is so overwhelmed by his feelings in the traumatic situation that he experiences a shattering flood of excitation passively and automatically.

It is akin to fright—which is the name of the condition to which one is reduced if he encounters a danger without being prepared for it. Fright lays stress on the element of surprise.

This condition can be observed in daily living. Take an example of a five-year-old boy, who no longer took afternoon naps. On this particular afternoon, he surprisingly fell asleep on his bed. After an hour, his sister came running up the steps, burst into his room and shouted, "Wake up!" He sat up abruptly, looked around and with a dazed, bewildered, lost look upon his face, he began to sob, "I don't know what to do. I don't know what to do." He was obviously unprepared for the sudden awakening, and though he was in his own room, sitting on his own bed, with his own sister present, he acted as if bewildered and lost in a totally new situation. After a few minutes of reassurance he regained his orientation and his fright was allayed. It was interesting that as his mother and sister tried to reassure him, they both began to feel his fright and looked frightened until he regained his composure. This example illustrates both the "sudden" and the "unprepared" aspects of fright. It also illustrates the contagious aspect of fright, which may be akin to the contagious aspect of group panic.

Another example can be presented. Many an individual has had the experience of peacefully walking along when suddenly some friend jumped out from behind a tree intending to frighten him. He may have been frozen with fear, or he may have attacked, or he may have run. Again this illustrates a severe reaction of fright brought about by a sudden trauma which finds the individual unprepared. But now let us suppose that this same individual knew that a friend was waiting to jump out at him, though he didn't know just when it would happen. As he walked along, he would be on guard. He would be preparing to meet the sudden, but no longer unexpected nor unprepared for, attack; this time as he walked along he might not be at ease. He might experience apprehension —which denotes a certain condition of danger and preparation for it even though it can be an unknown one. Because of his apprehension, which involves preparation, when the other person would jump at him he would not be overwhelmed by fright, as previously described. He would not stand frozen. He would not attack or run. He might even laugh and pretend to be unmoved.

The factor of preparation is all important to prevent individual panic. Such individual panic was observed among green, inexperienced combat troops, under fire for the first time. The method which the Army devised to prevent such reactions was to train the troops under conditions simulating combat. The famous infiltration courses of World War II, in which the soldier was required to crawl through difficult terrain with live machine gun fire going on overhead, was an attempt to remove the unprepared factor which leads to individual panic. The prolonged intensive rigid training periods in the United States attempted to make the bizarre and distressing conditions of combat an experienced daily routine in the lives of the soldiers.

Some years ago a magazine article described how a mother helped her daughter function adequately in frightening situations. It started when the mother was ill and had no one to send shopping for groceries. Her little girl was too young to perform such a task, but necessity forced her to take drastic measures. Using the cans of food which she had in the home, she set up a grocery store. Pretending to be the grocery man to her little daughter as the customer, they acted out over and over the exact details of shopping to be done that day. Then the child would go to the store and would shop perfectly . . . free of overwhelming anxiety because the situation was no longer a new one but now was one in which the child felt "at home." This emergency measure later became an accepted part of the child's training. Once she was to take a long train trip alone. She accomplished this difficult task with ease and com-

posure, because before she left home, a train set was constructed and each possible problem was worked through and acted out in detail. What to expect from, and how to answer, the porter, the waiter, fellow passengers, and other details were rehearsed. Overwhelming anxiety was prevented in this little girl by building up defenses within her to meet every possible situation. Thus she avoided any sudden, unexpected, unprepared-for situation which might throw her into such a terrifying state.

An example of a very anxious patient could further clarify the element of preparedness as a prevention against overwhelming anxiety. This girl would develop acute anxiety states in which she experienced uncontrollable shaking, confusion and muscular weakness whenever she was called upon to give talks to her colleagues. To prevent these acute anxiety states, she would memorize the talk word for word. The night before she would repeat the talk over countless times until it was letter perfect. Then she would go into the deserted lecture hall and practice her speech so as to be familiar with the location. When the time for delivering her talk came, she was able to perform adequately without being overwhelmed by the excitations from within.

At this point a possible objection should be eliminated. Of course, an emotionally mature individual does not have to make such elaborate preparations. A person with self-confidence is able to handle such situations with relative ease. The more emotionally stable the individual is, the less susceptible he is to disorganization of his personality. However, it is conceivable that every person has his breaking point, and when we consider such catastrophic stresses as arise from an atomic bombing, anyone could stand additional preparation against such an external pressure.

The theme of the prevention of overwhelming anxiety, here designated as individual panic, has up to now stressed two approaches. The *first approach* endeavors to eliminate the element of surprise. The *second approach* endeavors to prevent overwhelming anxiety by a state of readiness within the individual achieved by prior planning and preparation. In performing the preparatory measures (example: the anxious girl who rehearsed countless times) the individual experiences antecedent strain. But it is minimal compared to overwhelming anxiety. And it is in the service of the individual as compared to the overwhelming anxiety where the individual helplessly experiences the flood of excitation. Prior preparation establishes stronger inner ego defenses. I am sure this will be understood by the physician in terms of immunization shots for certain diseases. Overwhelming anxiety occurs in situations of stress when these defenses do not function adequately. The defenses are not prepared to meet the onslaught of the disintegrative threat. This results in temporary disruption of the personality or individual panic. From my experience with an infantry division in active combat, I would estimate that with adequate preparation and with a few minutes advance warning, psychiatric casualties would be reduced 10 to 20 per cent in the event of atomic bombing of metropolitan areas.

In the event of atomic bombing the responsibility for preventing the danger of surprise is in the hands of the government. This involves adequate intelligence and civil defense systems. Despite such measures the bombing may come as a surprise. Therefore, prior preparation is the bulwark of the individual's defense against the disintegrative threat.

There is a *third approach* to the prevention of overanxiety. This is a method of mastering anxiety not prior to, but at the time of the danger situation. It is easier to master anxiety while some task is being accomplished or some physical activity can be exerted. It is more difficult to master anxiety if one is forced to wait quietly. Increased activity during the emergency situation is an important physiological and psychological defense against overwhelming anxiety. On the basis of his personal experience in combat, one United States Army commander, prior to entering into a combat situation, would impress upon his infantry men that when they were in the midst of active combat they should "Do something! Follow some plan! Don't just stand there!" He knew that some course of action, even if it were not the best course, would be better than immobilization. He also knew that because of the intensive repetitious training program, prior to combat, the soldiers would be likely to choose some appropriate course of action during combat.

It was frequently observed that a soldier in combat where he could fire upon the enemy or attack the enemy showed good emotional balance. The same soldier lying wounded in a rear area hospital would become panic-stricken upon hearing the sound of enemy planes overhead. This was

because he could not protect himself, he could not run, he could not fire against or attack the enemy. He could not release appropriate physical activity which would have been a defense against becoming overwhelmed by internal excitation.

The people of England had one psychologically vital slogan. After each bombing they attempted to work constantly to return to "business as usual." This is a preventive of further emotional disorders.

The following example illustrates the three principles presented. Recently an interesting series of events took place in one of Detroit's suburbs. Coincident with the roar of airplane engines overhead, a gas explosion took place in a business building. Since talk of atomic bombing had been prevalent, many mistook this explosion for the real thing. In the schools the children reacted as they had been told. They dropped to the floor under the desks as they had been taught. Then they followed the previously rehearsed plan of defense against atomic bombing. Some described it as a field day for the children—an exciting interruption of the daily routine. However, it was quite different for the adults. Many became frightened. They did not know what to do. Many ran out of their houses into the street. Mothers called the police, asking them to bring the children home from school. They asked what they were to do. They were totally unprepared for the problem and reacted in a manner that would have been detrimental to themselves and to others had it been an atomic bombing. It is paradoxical that children, who need the least preparation, have had the most preparation. Adults, who need the most preparation, have had the least preparation.

What is to be understood from this example: first, that the element of surprise was present and therefore set the stage for fright reactions. Second, that where prior preparation had been carried out (in the school system) overwhelming anxiety was prevented, and where there had been inadequate or no preparation (among the adults) severe fright reactions were displayed. Third, that prior preparation had dictated a course of action to be followed at the time of the disintegrative threat and that the physical activity involved contributed to the defense against emotional disintegration.

The physician should know how to prepare himself emotionally for atomic bombing, not only for his own safety and that of his family but also in order to be able to instruct the many who look to him for guidance. The following suggested approach could be life-saving.

1. Don't shrug it off. Don't say "What's the difference. If it happens we won't be here anyhow!" Recent observations have indicated that the danger from atomic bombing is not as great as it was previously believed. It is estimated that with adequate preparation and with only a few moments advance warning, fatalities may be reduced by 20 per cent and casualties by 50 per cent.

2. People need never be helpless. There is always something to do to improve the situation. If this can be recognized, purposive, rather than aimless, activity will take place. Individual initiative could be of great benefit during the emergency.

3. Get serious about it and prepare yourself. Read the booklet put out by the U. S. Government, entitled "Survival Under Atomic Attack."* It should be memorized. Your house should be prepared as directed in "Five Keys to Household Safety."

Unfortunately, the majority of people have done little or nothing towards utilizing this information which could prevent possible death, injury or panic. This is understandable because of the natural tendency to avoid the unpleasant. Facing the unpleasant possibility of atomic bombing causes the development of anxiety. Such anxiety cannot be entirely avoided if adequate preparations are to be made. Nor is such anxiety entirely detrimental to the individual. *Anticipatory anxiety can be considered as minimal, controllable anxiety which can help to prevent later maximal, uncontrollable anxiety. The problem is one of voluntarily enduring a limited amount of anxiety in order not to be overwhelmed later by an excessive amount of anxiety.*

The city of New York is well advanced in its preparations for atomic bombing. A visitor who first notices houses with a sign in front saying "Bomb Shelter No. 30, Capacity 80" has a reaction of strangeness, but after a few days it becomes an accepted part of the environment. This indicates the importance of a master plan to help each individual know exactly what he is to do and to whom he can and should turn. This is being worked out at higher levels and is being brought down to

*"Survival Under Atomic Attack" is the official U. S. Government booklet obtainable from the Superintendent of Documents, Washington 25, D. C. Individual copies are for sale at ten cents each.

the level of individual participation. The national approach is not within the scope of this paper, but it is mentioned to help the physician recognize that he probably will be called upon to rehearse his designated role a number of times before the expected emergency. It is a difficult matter of timing when this should be done. It is up to the government to decide on the basis of their intelligence information. If it is done too early, it creates the problem of undue anxiety. If it is done too late, it leads to the danger of individual and group panic. If the physician is given specific duties and trained adequately, the danger of being overwhelmed by anxiety is greatly diminished. The physician should recommend to others that they take Red Cross courses in first aid. They are particularly good preparation for atomic bombing or other disaster. The more peaple who could participate, the better. Or he should recommend that they become active members of the Civil Defense Corps. This in itself contributes to individual defense against overwhelming anxiety.

Now, attempt to visualize an individual, adequately prepared as described above, in an atomic bomb explosion, where no alert has been given. He will see the flash before he hears the explosion. He drops to the floor immediately and pillows his head in his arms. He gets behind some available protective barrier. He knows that most casualties are due to flash burns and flying debris. He knows panic may cause him to become a casualty, even if he escapes from the danger of nuclear radiation. He remains there a long minute after the explosion . . . frightened beyond description, but not overwhelmed by his anxiety. After this long minute he must realize this! *It is all over* and *he is safe. Another bomb in the same place is unlikely.* With this recognition can come a feeling of comparative security.

Then there is work to be done. That is the key in continuing to ward off individual panic. He does the work for which he has been prepared. He may show initiative and give duties to other individuals. He keeps his wits about him in the service of self-preservation and also in the service of preserving others. Having trained civil defense members appear on the scene as quickly as possible prevents panic. Having physicians at work treating casualties is another panic preventor. In England, the mere presence of a person in authority was often sufficient to create a constructive attitude.

The importance of the *attitude* of the civil defense worker must be recognized. The attitude in itself contributes greatly to the successful care of other persons and to the prevention of disturbances in others. If the physician is adequately prepared, he will show by his authority and confidence that he is capable of coping with the situation. The emotionally disturbed person who has been reduced to feeling like a lost child will respond quickly. Experience with combat psychiatric casualties showed that the *attitude* of the individuals who *first* attend these casualties is *the most important factor* in their treatment. No matter how much the physician may learn about methods of treating combat casualties, it would not be of great value if he himself were emotionally disturbed during the emergency. The attitude of the physician could either soothe and protect the casualty or it could contribute to the further disruption of his ego. With this recognition of the importance of attitude in treatment of psychiatric casualties, the physician can turn to the following basic principles of treatment. Difference in treatment will be determined by the type of reaction within the individual. There will be many variations of individual reactions.

Tyhurst describes three characteristic but overlapping phases in individual reactions to sudden disaster or stress. The first period is *the period of impact,* which corresponds to the duration of the direct initial stress or emergency. During this period some individuals remain "cool and collected," and capable of organized activity. Some, and perhaps the majority, are stumped and bewildered. They may manifest automatic behavior and psychological disturbances associated with fear and anxiety. A third group show manifestly inappropriate responses with confusion or paralyzing anxiety and uncontrolled emotional outbursts.

During the *period of recoil,* which follows immediately after the period of impact and lasts several hours or days, there is a gradual return of self-consciousness and awareness for the majority. There may be emotional outbursts, anxiousness, fear and anger with a great need to talk over experiences. It is with this group during this time that the greatest good can be done with treatment. These individuals should be treated in a quiet atmosphere by medical aides who are calm, reliable and trained in their job and with a physician available as needed. These individuals need verbal reassurance and a chance to express their fears. Re-

assure them that the danger has passed and is unlikely to return. Hot food and hot sweet drinks are simple, effective aids at this time. Those individuals who are the least disturbed should be given constructive tasks to perform. Those who are more disturbed should be given an opportunity to sleep with or without the aid of barbiturate sedation as the physician deems it necessary. The individuals showing the most severe emotional disturbances may need heavy quick-acting sedation and even physical restraint.

The third period is called the *post-traumatic period*. During this time the full awareness of the disaster develops. The reactions of this period present persistent anxiety states, fatigue states, recurrent traumatic dreams, depressive reactions and post-traumatic neuroses. These will be evacuated and treated under the direction of trained psychiatrists who are familiar with such problems.

Now for a few important facts pertaining to age groups. The middle-aged panic most. The older age groups panic less, possibly because the elderly people feel that they don't have so much to lose. Children don't panic if parents don't panic. People who have hysterical neuroses in peacetime do well under such conditions of stress. The school and the teacher play an important role in the reaction of the children. To children under five the bombing has little reality importance. It is the reaction of the teacher or parent which has reality value. For example, in England a mother and her child were pinned under the debris of her shattered home for hours before being freed. They rushed the pair to the hospital. Upon arrival the main concern of the mother was that the child had been exposed to cold during the trip to the hospital. This typical British unruffled attitude was so important to the child. He wasn't the least bit upset by his experience. This example illustrates clearly the concept motivating the writing of this paper. The psychiatric casualty is reduced to the status of a frightened child. If the physician himself will be adequately prepared . . . *emotionally as well as technically* . . . his attitude will exert a calming and quieting effect upon the psychiatric casualties. It can prevent a further disruption of their egos. Then he can use his technical knowledge and skill to restore them to normal living.

Of all groups in the civilian population, the medical profession should become the best trained and best prepared for the emergency situation. I believe it is fruitless to make such a statement without contributing any thought as to how this difficult but vital task might be accomplished.

As indicated previously, repeated trials in a simulated situation would be of value. Extensive and intensive dissemination of information can be of value—which is one reason for publishing pamphlets and papers like this one. But the physician may not be able to integrate the information he receives with the anxieties it may cause him to experience. It might be accomplished by small groups of doctors meeting regularly with a qualified psychiatrist to discuss the problems to be faced. It might be considered an experience in "group therapy." The groups would be formed from those physicians who would be working together, following the bombing, at some assigned station. Any anxieties could be utilized as material for such discussions. Three problems which might arise will be mentioned here as examples:

1. How will you feel when you are forced to remain in the danger zone while others are being evacuated?

2. How will you feel about separation from your family?

3. How will you feel treating casualties without sufficient medical supplies, such as blood and plasma?

Summary

This paper attempts to formulate some basic psychiatric principles as guideposts for the physician participating in Civil Defense efforts. Through an understanding of these principles, the physician can (1) actively participate in emotional preparation, of himself and other individuals, for atomic bombing, and (2) contribute to the prevention and treatment of psychiatric casualties during the emergency situation.

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BLUE CROSS NOTICE

Congratulations to the Blue Cross-Blue Shield Plans. We have just received notice of the reciprocity agreement by which your Blue Cross-Blue Shield policy will pay full Michigan benefits in participating hospitals throughout the country instead of the emergency provisions. Remember this provision for your own good and don't forget to tell your patients who are Blue Cross holders about this new liberalization.

Casualty Evacuation Plan

By Joseph A. Witter, M.D., and
Raphael Altman, M.D.

Detroit, Michigan

IT IS OUR PURPOSE to outline the plan for evacuation of casualties in the event of a major disaster. Existing hospitals could not possibly handle the estimated 100,000 casualty load in the event of an atomic bombing. Therefore, facilities are being devised and planned to cope with any major situation, bombing or otherwise.

The Casualty Care Section of the Wayne County Medical Defense Plan has been designed to act as a buffer to the existing hospitals. Casualty Care Stations have been set up in schools peripherally placed about the city to receive patients as they are brought from the disaster area by ambulance. It is easy to see that present hospitals would soon be taxed beyond their capacities.

The basic unit in medical emergency care is designated as a Casualty Care Station. Sixty-seven of these have been set up in school buildings, in addition to forty-six such stations located in large industrial plants, manned by industrial medical personnel. This makes a total of 113 stations that can be activated. They are being so organized that they can participate immediately in event of disaster.

The function of these stations will be to provide triage, radiation decontamination, treatment of shock, burns, fractures, and other injuries requiring emergency surgery. They will send home those patients who do not need further treatment. Patients requiring more definitive care will be evacuated to existing hospitals. It will be immediately apparent that a station charged with such greater responsibilities will need a large complement of trained personnel and ample supplies.

The Casualty Care Stations have been divided into ten zones, each one controlled by a doctor, acting as zone leader, under whom there are station leaders each in charge of a school. Approximately 500 individuals are assigned to each station (Table I); among these are sixteen doctors, thirty nurses, ten pharmacists, twelve dentists and the civilian personnel who will act as nurses-aides, medical aides, litter bearers. Other specialists will handle communication, transportation, welfare and records. The medical as well as the civilian personnel in each station are being organized and trained in teams for more efficient function in case of disaster. Operating under the command of the doctor acting as school leader will be an executive officer, usually the school principal.

TABLE I. PERSONNEL OF CASUALTY CARE STATION AND FIRST-AID POST

	M.D.	Pharm.	D.D.S.	Nurse	Medical Aids	Lay	
Admin.	Leader	2		1		5	
Triage	2	2		2	12		
Shock	2			6	12		
				5	10		
Surgical Teams	10			—)7	—)14		
				2	4		
Gen'l. Duty			1	15	30		
Anesth.			5				
Supply		2				10	
Ist Aid Post	2	4	4		12		
Litter Teams					30	240	
Commun.						40	
Records						Welfare	
Ambulance						80	40 Ambulances
Totals	16	10	10	31	110	375	40

The floor plan of each Casualty Care Station has been analyzed and a traffic pattern (Fig. 1) laid out so there will be a smooth flow of patient traffic from the time they are admitted until disposition is made. The rooms have been marked for assembly, radiologic survey, triage, shock, burns, surgical wards, general wards, supply room and morgue. A mess area will also be set up in each school to feed the large complement of people involved in each station. Assigned to each school will be its own transportation unit, consisting of panel trucks or other vehicles which can function as ambulances. Separate doors with driveway access will be utilized for incoming and outgoing traffic. The school play yard will serve admirably as an ambulance dispatch point. The individual in charge of transportation will designate those vehicles which are to go forward to bring in litter patients from the disaster area and those which are to evacuate patients from the Casualty Care Station to existing or improvised hospitals.

There will of necessity be an unavoidable period of delay between the moment of an atomic explosion and the time when evacuation of casualties can begin. During this period the police, firemen and radiation monitors will survey the situation and issue clearance as soon as possible. This time will also be utilized by the headquarters medical group to ascertain which of the previously designated Casualty Care Stations will be safe and

Dr. Witter is chief, and Dr. Altman is alternate chief, Casualty Care Section.

available. In cases where a school designated as an Emergency Station is rendered unsafe for use, the personnel will immediately be assigned to reenforce other stations which can function.

The respective complements of these stations will be notified according to a pre-arranged plan. In the event of a major disaster all personnel attached to a Casualty Station are expected to re-

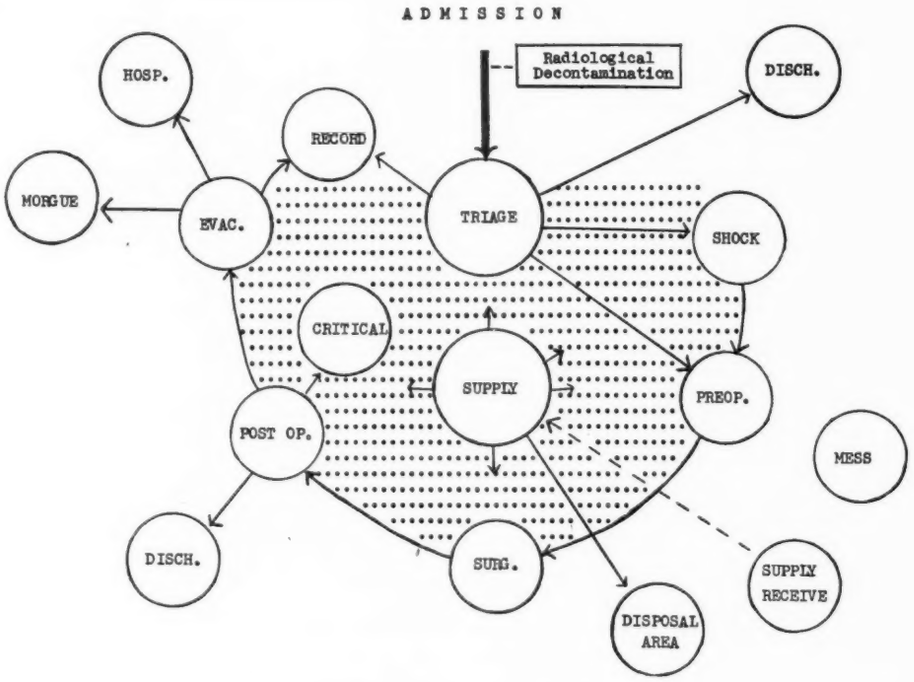

Fig. 1. Flow of traffic in Casualty Care Station.

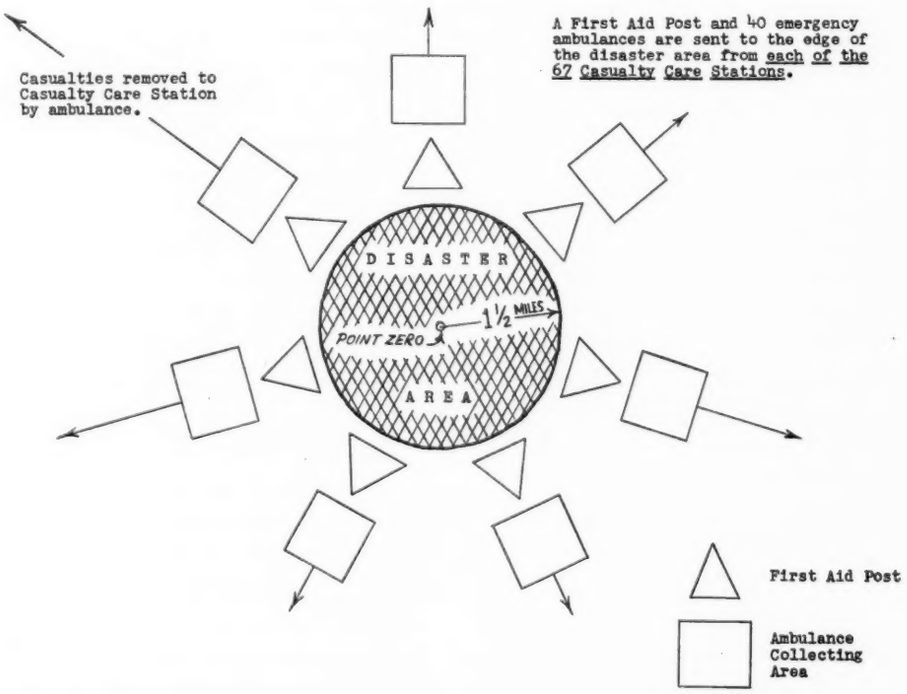
Casualties removed to Casualty Care Station by ambulance.
A First Aid Post and 40 emergency ambulances are sent to the edge of the disaster area from each of the 67 Casualty Care Stations.
DISASTER
1½ MILES
POINT ZERO
AREA
First Aid Post
Ambulance Collecting Area

Fig. 2. Relationship of first aid posts and Casualty Care Stations to disaster area. While only seven first aid posts and ambulance collecting areas are shown on this diagram, there would actually be sixty-seven—one sent out from each of the sixty-seven Casualty Care Stations.

port to the school as soon as possible. Assembling in the gym or auditorium, they will be briefed as to the zero point of the disaster, and the safe distance to which the forward echelons may go. The various teams shall begin to function at once.

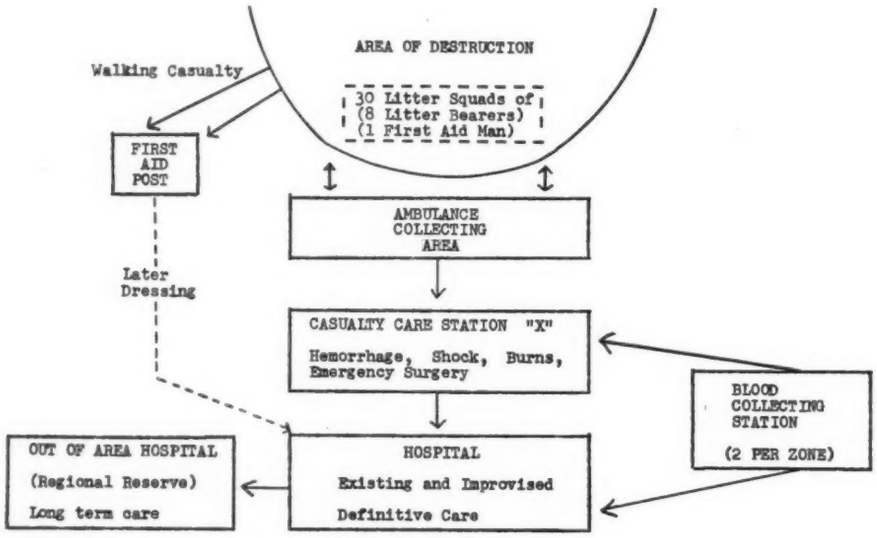

Fig. 3. General scheme of evacuation.

An integral part of each Casualty Care Station is the advanced echelon which will be composed of an ambulance collecting unit and a first aid post. As soon as those forming the complement of this group are assembled, they will be dispatched to a point as near to the scene of disaster as possible, usually within a mile and a half of zero point. They will there select suitable buildings and set up an ambulance collecting station for litter patients, and a first-aid post for care of the walking wounded. The first-aid post will consist of two doctors, four dentists, four pharmacists and four medical aides. The building they select will be designated by an appropriate banner prominently displayed. Casualties who are able to walk, and whose injuries are not sufficiently serious to require hospital care, will be directed to these posts. Lacerations will be sutured, minor fractures will be splinted, sedatives given, et cetera. It is felt that this plan will do much to relieve the congestion of the Casualty Care Stations and hospitals.

The ambulance collecting station will be set up very close to the first-aid post (Fig. 2). Attached to this echelon will be ambulance, litter bearers and first-aid men. Litter squads each consisting of eight litter bearers and one first aid man will be sent into the area of destruction to administer first aid, including morphine to seriously wounded persons. These casualties will be carried back to the collecting point. Here they will be placed in improvised ambulances and transported to a Casualty Care Station. The ambulances will then return to the collecting point. It is planned to have thirty litter squads, and forty vehicles to serve as ambulances, attached to each station. The litter bearers attached to each ambulance point, and who work in a disaster area, will be under the direction of mobile control units who will estimate the casualty load in their area of operation, direct the first-aid and litter squads and decide, where necessary, on priority of evacuation.

The safety of litter squads from the standpoint of radiation hazard will be the responsibility of radiologic monitoring crews.

The shuttle system of ambulances will also be available to bring forward additional personnel, and may also function as a means of communication and supply between the forward posts and Casualty Stations to which they are attached. Additional communication will be organized through radio cabs, short wave and motorcycle messengers.

This outlines the pattern of traffic flow, from the disaster area to the ambulance collecting post, from there to the Casualty Care Station, and, if necessary, from these stations to the existing hospitals (Fig. 3). It is easy to conceive that our existing hospitals would soon be taxed beyond their capacities to expand. The evacuation scheme

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Shock and Hemorrhage

By Joseph L. Posch, M.D., and
Rudolf J. Noer, M.D.
Detroit, Michigan

SHOCK MAY be described as a disturbance resulting from trauma, characterized by profound depression of the circulation, rapid, shallow breathing, more or less sensory and motor paralysis to the nervous system, and often accompanied by lowered body temperature. The basic physiologic disturbance in surgical shock, whatever the cause, is a decrease in the circulating blood volume. This fundamental disturbance must be borne in mind in all of our considerations, for it is correction of this decreased circulating blood volume which is the essential element of all of our treatment.

Shock has been discussed under many headings and there are many phases and terms related to it. In our consideration of the casualties to be met in major catastrophes, however, we are particularly interested in that phase of shock known as *traumatic shock*. This has also been referred to as "secondary shock" or "surgical shock." This type of shock may develop at almost any time up to several hours following the injury, and under certain circumstances where trauma is treated, or other harmful conditions intervene, the situation known as delayed shock may occur at a later date. In all of these situations, however, the basic situation is essentially the same. The degree of shock usually bears a more or less direct relationship to the severity of the trauma which is responsible for the condition.

Hemorrhagic shock is a condition very similar to that of traumatic shock which is produced by excessive loss of blood. While the conditions are not physiologically identical, for all practical purposes we may consider them as closely related, for the shock-like state following hemorrhage demands exactly the same treatment as traumatic shock except that the blood replacement program must be more extensive.

The symptoms of shock are varying degrees of loss of consciousness (though the individual is commonly entirely conscious and somewhat anxious in appearance), weakness, nausea and vomiting, perhaps incontinence, perhaps mental disturbances, and eventually total unconsciousness.

Clinical manifestations are evidence of severe trauma (usually), severe perspiration, pallor, cold and clammy skin, and shallow respiration. The patient may be restless, thirsty and nauseated. The pulse is rapid and rather feeble in many cases, though rapidity is not essential to a diagnosis of shock. There is a reduction in blood pressure including systolic, diastolic, and also pulse pressure reduction. Heart sounds are usually faint.

In severe shock the blood volume is reduced by 40 to 50 per cent of normal. Anemia may be present, and leukocytosis is the rule. Urinary output is low and the carbon dioxide content and chloride of the blood fall.

Treatment of shock should be directed simultaneously toward restoration of the lost circulating blood volume and toward treatment of the condition responsible for the shock. Hemorrhage obviously demands immediate treatment. Care must be taken in searching for the cause of hemorrhage not to increase the trauma by undue motion of the patient; dirty clothes should be removed by cutting away to minimize trauma. Severe bleeding may be controlled by pressure directly applied at the site of bleeding or, if necessary, a blood pressure cuff may be applied proximal to the area if it be on the extremities, and inflated as a tourniquet. As a general principle, arterial bleeding is the only type in which a tourniquet is wisely applied; venous bleeding can usually be controlled by local pressure and if on the extremity, by elevation of the part as well.

Overheating of the patient should be avoided. It has been shown that the traditional treatment of applying external heat to the patient in surgical shock is not a wise one since it may have some deleterious effect in producing capillary dilatation. The patient's normal body temperature should be conserved by blankets or other covering, but external heat should not be applied. Pain should be relieved if it is a prominent factor. The best method for administering pain-relieving drugs is by way of the veins since collapse of peripheral circulation makes absorption of subcutaneous drugs inefficient. Fractures of bones should be splinted as early as possible to lessen pain stimuli. The patient's feet may be slightly elevated, an elevation of about 15 degrees apparently being of aid in early shock.

When severe dyspnea is present from chest or abdominal injuries, however, the patient will breathe more easily in a sitting or semi-sitting position. Rest is of fundamental importance to all patients in shock.

Replacement of the lost circulating blood volume should be begun as early as possible. Whole blood should be given immediately if available, either intravenously or, if necessary and if equipment is available, by intra-arterial infusion. A great deal of blood may be needed, for it has been estimated that in severe injuries patients may sometimes require as much as 1.5 to 4 liters of blood. If blood is not available, blood plasma is the next best material to use for replacing the lost blood volume. In the absence of blood plasma, physiological saline solution or dextrose solution may be given, but one must bear in mind that the rapid diffusion from the circulation of these electrolytes makes their use in the treatment of shock of only temporary value. Other materials for intravenous fluid therapy are discussed elsewhere in this series and will not be considered here.

Oxygen therapy is also very useful, and the rate of flow if by intranasal catheter should be at least 7 liters per minute. Careful placement of the intranasal catheter is necessary if efficient absorption is to take place. Ordinarily the length of catheter needed in the nasopharynx is about that distance from the tragus of the ear to the nostril. A very useful procedure, if the patient is conscious, is to measure off this distance on the tip of the nasal catheter, advance the catheter to about the indicated point, and then further advance it until the patient swallows a bolus of oxygen. The catheter should then be withdrawn to a point just proximal to that at which he does swallow a bolus of oxygen. This is the most efficient location for the tip of the nasal catheter.

Patients in surgical shock must not be moved until the shock has been controlled. The only emergencies which take precedence over treatment of shock are hemorrhage and asphyxia. Both of these must be controlled immediately. Most other conditions, however, can await replacement of some of the lost circulating blood volume and some recovery of the patient. Only if shock persists in spite of emergency therapy, and concealed bleeding is suspected, may surgery be performed immediately for control of bleeding sources.

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The Training of Blood Procurement and Distribution Teams

By D. H. Kaump, M.D., and E. R. Jennings, M.D.

Detroit, Michigan

THERE are many problems facing Civilian Defense authorities in time of disaster. One of the more important of these problems concerns the procurement and distribution of fresh whole blood. The quantity of this material needed has been variably estimated from 30,000 units per week for each 50,000 casualties to 200,000 units in forty-eight hours for 80,000 to 100,000 casualties. Recognizing this acute need, the Wayne County Civil Defense authorities set up, in the Services Branch of Civilian Defense, a blood procurement and distribution section. This section is charged with the development of ways and means to provide blood and blood substitutes to meet emergency needs. The section functions, as outlined, include (1) a plan for the procurement of donors at the time of emergency, (2) provision for personnel for drawing and typing of blood, (3) provision for the storage of blood at the donor station, (4) provision for the issuing of blood as required for transportation to casualty stations, first aid stations, improvised hospitals and existing hospitals, (5) provision for storage and issuance of blood and blood substitutes provided by other agencies, and (6) co-ordination of the above with the efforts and facilities of the American Red Cross.

The committee appointed to study and act on this program included Doctors Raphael Altman, O. A. Brines, W. B. Cooksey, E. J. Hammer, W. B. Harm, F. W. Hartman, F. W. Hyde, E. R. Jennings, J. A. Kasper, E. C. Long, Perry Martineau, Walter Stryker, and D. H. Kaump, chairman. The committee then divided its task into two major divisions: first, the estimate of the location and the number of blood procurement and distribution units which would be necessary, together with the methods of recruitment of donors; and second, the composition, recruitment, and duties of the various units together with the training curriculum which would be necessary.

From the Departments of Pathology, Wayne University College of Medicine, Providence Hospital, and Alexander Blain Hospital.

Location and Number of Units

Regarding the solution of the first phase of the general problem, it was decided to activate twenty-five blood procurement and distribution units, each to consist of forty or more persons as outlined below. Of the twenty-five units, two are to be assigned to each of the ten major medical zone divisions and five units are to be free and available for assignment in any location where they are needed.

The committee felt that "preparedness" blood typing would aid in the recruitment of donors, in that it would allow the collection of blood from specific and known types with the greatest possible facility. Whole blood transfusions cannot be given until the blood type and Rh factor of both the recipient and the donor are known, except when group O universal blood donors are used. Since only forty-five per cent of the general population have O type blood, it would be impractical to supply in the amounts needed. Therefore, it will be necessary to use all types of blood, matching donors and recipients type for type. In a disaster area many laboratory facilities may be wiped out, and those remaining will be greatly overtaxed. Under disaster conditions it would probably be impossible to type in time more than a small percentage of the number of injured who need immediate blood transfusion. In order that as many individuals may receive blood as quickly as possible, it will be necessary to know their blood types and Rh factors before disaster strikes. By ascertaining the blood types and Rh factors in a large percentage of the population before the bombs fall or other types of disaster occur, and by recording this information, it will be possible to give them needed blood almost immediately. The donors would be alerted by radio or telephone by the Office of Civil Defense and requested to report to specific bleeding stations in their respective areas. Only donors holding Office of Civil Defense, Michigan Department of Health, or American National Red Cross identification tags, or pocket cards, would be requested to report to blood collection stations. This would include those individuals between the ages of eighteen and fifty-nine who have had "preparedness" blood typing performed.

Each bleeding and processing center would have supplies and equipment. The essentials are: donor sets and recipient sets, donor bottles, carts, ice, tables, chairs, tourniquets, donor cards, alcohol, surgical dressings, syringes, Wassermann tubes, saline, typing sera, test tubes, racks and opsonic pipettes. The following items would be nice to have if they were available, but the work could be done without them: thermometers, stop watches, sphygmomanometers, copper sulfate solution and containers, procaine, water baths and centrifuges.

Composition and Training of Units

A blood procurement and distribution unit is to consist of four blood collection teams and one blood typing team. Each unit is to be under the direction and supervision of a physician specifically trained for this purpose. A single blood collecting team is to consist of a receptionist, a team chief and assistant team chief, two medical history nurses, one bleeding room aide, one custodian of blood, and one recovery room attendant. The blood typing team is to consist of one technician, two assistant technicians and two technician's aides. Thus the total composition of the unit includes approximately forty persons.

The duties of the blood procurement team are as follows: The *team chief* is responsible for the operation of the bleeding team, and the responsibilities of this duty include that he must be an expert venisectionist, must be fully trained in the setting up of the blood collection station, and be aware of the location of supplies and equipment to be used in this station. In addition, he must know and understand completely the over-all plan for collecting whole blood and the method of preparation of whole blood for transportation as well as the management of donors with reactions. The *assistant team chief* will also be an expert venisectionist and should be able to assume the duties of the team chief if necessary. The *receptionist* will act as a "traffic director" and will be responsible for the training and administration of two or more clerks, who can be trained to record the initial history which includes the name, address, and telephone number of the donor, who can examine identifications or pocket cards and screen out unsatisfactory donors, and prepare bottle labels. He will accept only those donors of specified types. The *medical registration nurses* will consider the medical history, such as past diseases (particularly hepatitis), will record the temperature, hemoglobin, blood pressure, and will reject those donors who are found to be unsuitable for any medical cause. The *bleeding room attendant* will escort the donors to the bleeding room, assist the veni-

sectionist and prepare the bleeding bottles and blood procurement sets for use. The *blood custodian* will accept the bottles of blood after they have been procured, and prepare them for storage or for shipment together with the recipient sets. Immediately after procurement, he will cool each bottle of blood for approximately fifteen minutes in cracked ice and place the filled blood bottles marked type O in insulated paper cartons. He will place a recipient set in each carton for each bottle of blood, will then seal the carton and apply the label bearing "type O blood" and the date of collection. Those bottles of blood which are not of O type he will label appropriately and finally deliver the cartons of blood to the "transportation office," which will pick up the cartons of blood from the various blood collecting stations and deliver them as directed. The *recovery room attendant* may train an assistant to work with him on an emergency basis if necessary. He will take donors to the recovery room when necessary, will attend them there and release them subject to the approval of the team chief.

The *blood typing team* will be in charge of the *senior technician,* who will accept the blood for typing and turn it over to one of the assistant technicians. The *assistant technicians* will prepare the cell suspensions and serum solution, set up the blood tying tubes and act as recorders for the final interpretation. The interpretation as to blood type will be made by the technician in charge. The *aides* will clean the glassware, assist with the labeling of glassware, and will see that the material is appropriately cleaned and returned to the place of its source.

It is estimated that one such unit could procure approximately 600 units of blood in an eight-hour period. Thus, it would be possible for the twenty-five units to collect approximately 15,000 units of blood in each of the eight-hour periods during the activation of the unit. Initially, at least, this would prove to be an inadequate amount, and consequently it would be necessary that similar units be set up in other portions of the state in order that they might procure blood in a similar manner and send it in to the local office of Civil Defense.

It is realized that in the event of a disaster many procedures which are usually performed in a well-organized civilian blood bank would probably not be carried out. Since, however, the personnel of the bleeding teams and typing teams will be laymen and without much previous laboratory experience, it is felt that during the training period more information should be given them than they really need. Much of this will be useful merely as background and orientation for them, and it is felt that, should an emergency arise, they would be much better able to decrease the amount of processing if they understood the ideal arrangement of a civilian blood bank. With this in mind, the following curriculum was designed, and used for instruction of students at Marygrove College. We hope to learn from this study whether it is possible to train lay people in this work in the short time allotted for it.

CURRICULUM—BLEEDING TEAM

Period 1:
- (1) Introduction
  - (a) Purpose of course
  - (b) History of blood transfusion

Period 2:
- (2) Examination and records
  - (a) Donor cards
  - (b) History
  - (c) Temperature
  - (d) Pulse
  - (e) Blood pressure
  - (f) Hemoglobin determination
  - (g) Assignment of accession number
  - (h) Labeling of specimens
  - (i) Reasons for donor rejections

Period 3:
- (3) Positioning of patient
- (4) Draping
- (5) Application of tourniquet
- (6) Preparation of skin
- (7) Anatomy of veins of antecubital space

Period 4:
- (8) Selection of vein
- (9) The donor set
- (10) The anticoagulant
- (11) The venipuncture—anesthesia

Period 5:
- (12) Collection: side tubes
- (13) Surgical dressing
- (14) Recovery room
- (15) Donor reactions
- (16) Hemoglobin regeneration
- (17) Storage of blood

CURRICULUM—TYPING TEAM

Period 1:
- (1) Purpose of course
- (2) Duties of members of team

Period 2:
- (3) Preparation of glassware
- (4) Constituents of blood—clot, serum, plasma, et cetera
- (5) History of blood groups
- (6) Technique—OCD method—collection, reverse typing, direct typing, et cetera
- (7) Errors in typing

Period 3:
- (8) The compatibility test—cross match
  - (a) Definition
  - (b) Technique
  - (c) Compatibility of groups
  - (d) Sources of error

Period 4: (9) The Rh factor
- (a) Discovery
- (b) Dual nomenclature
- (c) Antibodies
- (d) Orders of antibodies
- (e) Technique

Period 5: (10) Transfusion reaction
- (a) Classification
- (b) Laboratory procedures which aid in diagnosis of reaction

The teaching program, as outlined above, has been carried out and will be followed by "on-the-job" training. It is hoped that the students of the bleeding teams will be permitted to observe the operations of the American Red Cross at their main building and in their mobile units. During the first phase of this on-the-job training, they will watch the workers at the Red Cross Center perform their daily tasks. They will be assigned in four-hour periods to each of the three major stations, (1) history taking, preparation of materials and equipment, (2) venipuncture and bloodletting, (3) recovery room and blood storage. Following this training, they will be given an opportunity to practice venipuncture in some Detroit hospitals and clinics. Perhaps additional experience can be obtained as assistants for the OCD Preparedness Typing Program in this area. At this point in their training, specialization of the members of the bleeding teams will begin. Those students who are most adept at venipuncture and learn this technique with the greatest facility will be designated as team chiefs and assistant team chiefs. The others will be assigned as receptionists, medical history nurses, bleeding room aides, blood custodians, and recovery room attendants. Once a student has been definitely classified in one of the above categories, he will henceforth receive instruction and gain experience in only the duties of his special part of the team. The final phase of the training of the personnel of the bleeding teams will be in the American Red Cross Mobile Units. Following an additional period of observation, the students will be permitted to assist and participate in the activation of these groups. The American Red Cross Mobile Unit is ideal as a training center. The job these workers perform and the problems they face each day as they travel about the city are almost identical to those we envision for the bleeding teams in time of disaster.

It is proposed that the "on-the-job" training of the typing teams can be accomplished in the hospital laboratories of Detroit. It is anticipated that these students will be trained in small groups and under close supervision.

Following the completion of the course, the members of the teams will be examined in practical laboratory and blood bank procedures. We do not know at the present time whether the curriculum, together with the "on-the-job" training as designed, will satisfy the need that exists. It is only by examination of lay people who have followed this course of study that we will learn whether it is possible to train previously uninitiated people in these procedures.

The faculty for this pilot study has been composed of pathologists in the Detroit area. Should the experiment prove successful, it is thought that enlargement of such training programs to include the large numbers of people necessary can be developed from technical personnel now working in the Detroit hospital laboratories.

MSMS

Many a veteran of the last war will remember that he was generously exposed to left-wing socialistic propaganda, including pamphlets which painted a misleading but rosy-hued picture of socialized medicine. . . . The young, eager-seeking and uncertain, but impressionable, minds of the eighteen-year-olds would be fertile ground for indoctrination in socialized farming, socialized housing, socialized power, and for Oscar Ewing's socialized medicine.—AAPS, February News Letter.

CASUALTY EVACUATION PLAN

(Continued from Page 312)

then calls for transportation of patients from existing hospitals to outlying communities such as Birmingham, Pontiac, Flint, Mt. Clemens, Ann Arbor, Eloise, et cetera. It is thought that these communities will be able to provide evacuation facilities for this final step in the chain.

Organization on such a vast scale is difficult and requires the time and co-operation of many individuals. Some details are still to be perfected. We feel a plan that can quickly be activated is insurance for the community. It is costly in time, effort, and money, but it is insurance we *must carry.*

Management of Burned Patients

By Joseph L. Posch, M.D.
Detroit, Michigan

THE TREATMENT of severe burns must achieve three objectives:

1. The prevention and combating of shock.
2. The restoration and maintenance of the patient's normal physiological status.
3. The prevention of infection and the promotion of early epithelial covering of the denuded surfaces.

First Aid

Administering first aid in burn cases, Civil Defense first-aid workers should carry out only a gross cleaning process, i.e., removal of large and easily separated particles of clothing, dirt, debris, or skin. They could then apply the appropriate size of cellulose pad and secure it with a bandage.

Later, after arrival in a hospital, the attending physician may wish to remove the dressing and inspect and clean the area. He would then apply a new cellulose dressing or change to another method of treatment for which he had the necessary supplies available.

Casualty Care Station—Suggested Treatment

1. History (if possible). Determine the etiological agent.

2. Examination of patient. Estimate burned areas and search for other injuries.

A useful estimate of body burns may be obtained from the following figures:

	Per cent of Surface Area
Entire Head	7
Entire Neck	2
Anterior Trunk	13
Posterior Trunk	13
Both Buttocks	5
Genitalia	1
Both Upper Arms	8
Both Forearms	6
Both Hands	5
Both Thighs	19
Both Legs	14
Both Feet	7
	100%

TABLE I. CONDENSED OUTLINE FOR THE TREATMENT OF BURNS

I. Determine Depth	
A. 1st degree—reddening of skin	
B. 2nd degree—blisters	
C. 3rd degree—complete burn of skin with a resultant yellowish greenish color	
II. Estimate of Body Surface	
Both lower extremities including the buttocks	—38%
Trunk including the neck	—38%
Both upper extremities	—18%
Head	— 6%
III. Replacement of Body Fluids	
Blood or Plasma—1 liter per 10% of body burns	
2 liters per 20% of body burns	
3 liters per 30% of body burns	
IV. The Employment of Oral Electrolytic Solution	
3 to 5 quarts a day—consisting of the following solution: 1½ level teaspoonfuls of salt and ⅔ level teaspoonfuls of sodium citrate or sodium bicarbonate to each quart of water.	
V. The Application of A Large Cellulose Burn Pad	

3. Estimate the depth of the burn:

Classification of Burns:

1st degree: Destruction of surface epithelium only.

2nd degree: Surface destruction plus blistering due to splitting of epithelial layers.

3rd degree (superficial): Destruction of the entire epidermis, though some epithelial elements (sweat glands and hair follicles) may remain.

3rd degree (deep): Loss of all epithelial elements, with charring of the deeper tissue.

4. Search for other injuries—severe shock may result from compound fractures or severe bleeding, as well as from burns.

5. Put the severely injured patient at rest. Make him lie down. A walking burn patient is much more susceptible to shock than one who has remained at rest. Give morphine sulfate grains 1/6 intravenously, slowly. The absorption by any other route is unpredictable in burn shock.

6. If there is a personnel shortage, concentrate efforts at first on those patients with burns of over 10 per cent, and with severe (3rd degree) burns of less than 30 per cent of body surface.

7. Control room temperature to help combat shock, if possible.

8. Give parenteral fluids ("cut down" or femoral puncture if necessary).

Whole blood—2.5 to 5 per cent of body weight is preferable to compensate for imme-

diate decrease in red blood cells mass. A simple formula to follow is:

1 liter for a 10 per cent burn
2 liters for a 20 per cent burn
3 liters for a 30 per cent burn

This should be given in the first twenty-four hours, and the larger part of it in the first six hours.

Half again as much should be given in the next twenty-four hours.

If whole blood is not available, irradiated plasma may be substituted, but blood is preferable.

Electrolyte solutions are also necessary. Orally, the patient can be given a solution containing 1⅓ level teaspoonful of salt and, when possible, ⅔ level teaspoonful of sodium citrate or sodium bicarbonate per quart. Three to five liters may be taken in the first twenty-four hours. During the next day, the patient should take one-half of that amount for the second twenty-four hours.

A plasma substitute such as gelatin, dextran, or periston may be used.

9. Eye burns should be treated to prevent corneal opacities (see section on eye injuries).

10. If available, oxygen by nasal catheter—8 liters per minute—should be given to combat anoxia.

11. As nearly as possible, infection should be prevented and the patient handled as cleanly as possible. However, in large disasters, it will be impossible to adequately clean the burned areas, so, the immediate local treatment should consist of the application of a dressing consisting of a large cellulose pad.

It is hoped that the available supplies will include the following:

Large cellulose pads—1 inch or more thick—faced and backed with gauze—constructed like a sanitary napkin. The gauze facing is extremely fine (44 by 36 type I gauze) to minimize adherence to the burned area. The backing is a much coarser gauze to give greater protection.

Two sizes may be available—one size approximately 12 by 24 inches for application to extremities and smaller burned areas; and the other, 24 by 36 inches.

For large burned areas of the trunk, 3-inch and 6-inch widths may be included.

These pads can be cut down into various shapes to fit smaller burned areas.

The pad is then held in place by woven elastic roller bandages applied firmly and evenly but with only gentle pressure. Rubberized bandages should not be used.

Place the pad or dressing over the burn so that it covers the area completely. If more than one pad is needed, place the pads so that the edges do not overlap. Avoid having gaps of uncovered tissue.

Be sure that the pressure is even and firm, and not too tight in one area, to cut off circulation. It is better to have a loose dressing than one that is too tight.

12. The patient is made comfortable in bed, with burned extremities elevated.

13. Analgesics and sedatives are used, if necessary, for the control of pain.

14. Oxygen therapy is continued as long as possible.

15. Encourage and provide means for all intake of fluids of the high caloric and high protein diet. If necessary, tube feedings are administered. Vitamins and iron are main aids in the general nutritional therapy. Penicillin is given to control infection.

Observe closely for acute massive edema, laryngeal edema (a tracheotomy may be required), and also observe for tracheal bronchitis.

Burns of the chest or head are also associated with burns of the respiratory passages, and are often more dangerous than they appear to be. Either laryngeal edema or pulmonary edema may develop. If laryngeal obstruction develops, emergency tracheotomy may be life saving.

16. An indwelling urethral catheter may help prevent soiling of dressings where indicated.

In mass disasters, the main objectives are prevention and control of shock, coverage of the wounds, reduction of pain, and immobilization to rest the injured parts.

MSMS

It is hard to understand how members of an organization dedicated solely for their benefit and survival can neglect taking an active part in the work of that organization.—KARK L. SWIFT, M.D., President Wayne County Academy of General Practice.

Treatment of Soft Tissue Injuries

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IN ANY MAJOR catastrophe, injuries to soft tissues create problems which may be divided as follows:

1. Hemorrhage requires prompt control.

2. Asphyxia, if present, demands immediate relief.

3. Simple wounds must be differentiated from complicated wounds.

Involvement of underlying large vessels or nerves, or serous cavities such as joints, pleural or peritoneal sacs, may project a degree of seriousness into what may first appear to be a simple injury.

4. The prevention of infection in general, tetanus or gas gangrene in particular, is a major objective.

5. The very number of casualties may cause confusion and overwhelming of existing facilities to the point where determination of priorities in treatment assumes paramount importance.

This discussion will confine itself to the treatment of abrasions, contusions, sprains, puncture wounds, avulsions, lacerations, and traumatic amputations at or near the site of injury (1) at the first aid post, (2) at the casualty care station, and to their disposition. It will also indicate those cases which will definitely require further care, with some estimation of priority needs in their evacuation.

Serious bleeding as a consequence of these injuries may greatly complicate them. The loss of one or two pints of blood will almost surely induce a state of shock, and the loss of half of the body blood is always fatal. In all serious bleeding, the first thought should be to apply direct pressure to the bleeding point. If bleeding cannot be controlled by direct pressure (a piece of cloth, a portion of the patient's own clothing, a bath towel, or a gauze compress) one should think of the use of a tourniquet at a site proximal to the injury if the wound be on an extremity. Deep bleeding from the head, neck, or trunk of the body makes such control impossible, and pressure alone must be relied upon as the casualty is first encountered. It cannot be too strongly emphasized that a tourniquet is a dangerous instrument and that the person who applies it must assume the direct responsibility for the welfare of the extremity distal to its point of application. He must see to it that the patient is brought to the attention of someone competent to apply other measures for the control of hemorrhage within a time interval of twenty to thirty minutes and must directly call to the attention of the personnel to whom he transfers that patient that a tourniquet has been applied to the extremity.

In the event of great catastrophe, minor wounds will necessarily be ignored and the patients referred from the site of catastrophe through the casualty care station to some distant point, even ten to twenty miles away for care. However, if at all possible, abrasions, puncture wounds, avulsions and lacerations should at least be washed with a neutral soap followed by a rinse of sterile water, washed with saline alone, or at least by tap water alone; a dry sterile dressing applied to convert the open wound to a closed wound; penicillin of the three-day variety administered; and a brief descriptive diagnosis, the treatment, and the disposition of the case noted on a tag so that duplication of this early simple treatment will not be necessary as the patient travels away from the area.

The problem of tetanus could be solved by universal toxoid administrative with annual booster shots. Tetanus antitoxin should probably, in the event of great catastrophe, be administered only for the relatively deep puncture wound and the laceration which is to be closed by either suture or adhesive tape coaptation. The danger of anaphylactic shock and serum sensitization, and the need for repeated fractional doses in many cases, probably indicate that tetanus antitoxin should not be administered at the time of catastrophe, but be postponed for two or three days.

Scalp.—

I. Abrasion:
   1. First Aid Post (FAP)
      (a) No treatment.
   2. Casualty Care Station (CCS)
      (a) Wash with tap water.
      (b) Dry sterile dressing.
      (c) Penicillin.
      (d) Tag. (This term here and hereafter refers to brief descriptive diagnosis, treatment given, and disposition of case.)

II. Contusion:
1. FAP
(a) No treatment.
(b) If question of degree of injury, refer to CCS.
2. CCS
(a) Inquire concerning loss of consciousness, headache, dizziness, diplopia, et cetera. (See section on Cranial Injury).
(b) Tag. (Warn *patient* concerning later development of symptoms.)

III. Puncture Wound:
1. FAP
(a) Compress with firm pressure to control bleeding if necessary.
(b) Refer to CCS.
2. CCS
(a) Shave sufficient hair for good examination.
(b) Wash with tap water.
(c) One or more deep sutures may be required to control bleeding.
(d) Dry sterile dressing.
(e) Penicillin.
(f) Tag. (If question of injury to skull or penetration, refer to section on Cranial Injury.)
(g) Tetanus antitoxin (?).

IV. Avulsion of Scalp:
1. FAP
(a) Firm pressure with gauze compresses to control bleeding.
(b) Send to CCS.
2. CCS
(a) Wash with tap water.
(b) Control hemorrhage by ligation or suture ligature if necessary.
(c) Replace scalp and suture.
(d) Dry sterile dressing.
(e) Penicillin.
(f) Tag.
(g) If avulsion cannot be replaced to cover pericranium, send to hospital.
(h) If avulsed skin is absent, send to hospital.

V. Laceration of Scalp:
1. FAP
(a) Firm pressure with gauze compresses to control hemorrhage.
(b) Send to CCS.
2. CCS
(a) Shave hair for exact examination.
(b) Wash with tap water.
(c) Look for foreign bodies and injury to calvarium.
(d) Suture wound.
(e) Dry sterile dressing.
(f) Penicillin.
(g) Tag.

Face.—

I. Abrasion:
1. FAP
(a) No treatment.
2. CCS
(a) Wash gently with tap water.
(b) Dry or vaseline gauze sterile dressing.
(c) Penicillin.
(d) Tag.
If of severe degree with tissue loss, refer to Maxillo-Facial Group. (See proper section.)

II. Contusion:
1. FAP
(a) No treatment.
2. CCS
(a) Check for fracture.
(b) If suspected, refer to hospital for x-ray.
(c) Tag.

III. Puncture Wound (See section for Maxillo-Facial Injury):
1. FAP
(a) No treatment except for control of bleeding by gauze compress pressure.
2. CCS
(a) Wash with tap water.
(b) Probe wound for underlying injury, penetration of sinus, et cetera.
(c) Make decision on necessity for suture closure.
(d) Penicillin.
(e) Tag.

IV. Lacerations:
1. FAP
(a) Pressure over gauze compresses for control of bleeding if necessary.
2. CCS
(a) Divert to Maxillo-Facial group cases involving appreciable structural disorganization, loss of tissue or member, et cetera.
(b) Wash with tap water.
(c) Control bleeding by ligation if necessary.
(d) Suture or adhesive tape coaptation.
(e) Dry sterile dressing.
(f) Penicillin.
(g) Tag.

Neck.—

I. Abrasion:
1. FAP
(a) No treatment.
2. CCS
(a) Wash with tap water.
(b) Dry sterile dressing or vaseline gauze.
(c) Penicillin.
(d) Tag.

II. Contusion:
1. FAP
(a) No treatment.
2. CCS
(a) Examination for emphysema, hematoma, et

cetera. If present, divert to hospital for further care.
(b) Tag.
(c) Further care fifth day.

III. Puncture Wound:
1. FAP
(a) Pressure compress to control bleeding.
(b) Always send to CCS.
2. CCS
(a) Assess for damage to great vessels, nerves, injury to pleura, perforation of trachea or esophagus. If present, divert to hospital immediately for further care. Determine need for tracheotomy. (See EENT section for indications.)
(b) If assessment for serious deep injury is negative, wash with tap water.
(c) Dry sterile dressing with bulk.
(d) Penicillin.
(e) Tag.
(f) Further care on third day.

IV. Laceration:
1. FAP
(a) If major, dry sterile dressing with pressure to control bleeding.
(b) Evacuate to CCS.
2. CCS
(a) Wash with tap water.
(b) Assess for deep injury as in puncture wounds. (If complicated, divert to hospital for definitive care.)
(c) If no deep injury, wash with tap water.
(d) Suture or coapt with adhesive tape.
(e) Penicillin.
(f) Tag.

Chest Wall.—(See section on Injuries to Chest)

I. Abrasion:
1. FAP
(a) If major, dry sterile dressing.
(b) Evacuate to CCS.
2. CCS
(a) If involving large area or of some depth, wash with tap water.
(b) Apply layer of vaseline gauze.
(c) Dry dressing with adhesive tape.
(d) Penicillin.
(e) Tag.

II. Contusion:
1. FAP
(a) Direct to CCS.
2. CCS
(a) Assess for rib fracture, intrathoracic complication, injury to liver or spleen.
(b) If negative, tag.
(c) If fracture, of three or more ribs, send to hospital.
(d) If possible internal injury to liver or spleen, refer to shock team for observation or evacuate to hospital.

III. Puncture Wounds:
1. FAP
(a) Assess for pleural injury (emphysema or sucking).
(b) If minor, dry sterile dressing and walk to CCS.
(c) If complicated, vaseline gauze dressing with pressure to tamponade wound.
(d) Evacuate to CCS (by litter if there is dyspnea or shock).
2. CCS
(a) If minor, wash with tap water. Dry sterile dressing. Penicillin. Tag.
(b) If complicated by emphysema, but not sucking, wash with tap water. Vaseline gauze. Dry sterile dressing with some bulk for tamponade. Tag.
(b) If complicated by emphysema, but not sucking, wash with tap water. Vaseline gauze. Dry sterile dressing with some bulk for tamponade. Tag.
(c) If sucking, wash with tap water. Suture sucking wound. Dry sterile dressing. Observe for increasing dyspnea, which may indicate pressure pneumothorax. Evacuate to hospital.
(d) If pressure pneumothorax develops, place thoracotomy tube (see section on Chest injuries) or remove some sutures from wound, and place vaseline gauze tamponade. Dry sterile dressing. Evacuate to hospital.

IV. Laceration:
1. FAP
(a) Dry sterile dressing if necessary to control bleeding.
(b) Evacuate to CCS.
2. CCS
(a) If minor, wash with tap water. Dry sterile dressing. Penicillin. Tag.
(b) If major, wash with tap water. Suture. Dry sterile dressing. Penicillin. Tag.
(c) If complicated by pleural involvement, treat as in (b). Observe for developing pressure pneumothorax. Evacuate to hospital.

Abdomen.—

I. Abrasion:
1. FAP
(a) If major, dry sterile dressing. Evacuate to CCS.
2. CCS
(a) If minor, wash with tap water. Dry sterile dressing. Penicillin. Tag.
(b) If major, wash with tap water. Vaseline gauze dressing. Dry sterile dressing. Penicillin. Tag.
(c) If appreciable skin loss, should be treated as burn. (See section on Care of Burns.)

II. Contusion:
1. FAP
   (a) If major, evacuate to CCS by litter.
2. CCS
   (a) If minor, examine and advise. Tag.
   (b) If major, assess for shock and peritoneal irritation.
   (c) If signs of peritoneal irritation, but no shock, evacuate to hospital by litter immediately.
   (d) If shock alone or accompanied by signs of peritoneal irritation, refer to shock group for evacuation to hospital by litter when feasible.
   (e) Penicillin if complication present or suspected.

III. Puncture Wounds:
1. FAP
   (a) If minor, dry sterile dressing. Evacuate to CCS.
   (b) If major, evacuate to CCS by litter.
2. CCS
   (a) Wash with tap water.
   (b) Assess for signs of shock and peritoneal irritation.
   (c) If no evidence of penetration, dry sterile dressing. Penicillin. Tag.
   (d) If signs of penetration but no shock, evacuate to hospital by litter for exploration.
   (e) If shock alone or plus signs of penetration, refer to shock group. Then evacuate to hospital as soon as feasible for exploration.
   (f) Give penicillin if complication present or suspected.
   (g) If minor puncture wound by all criteria, wash with tap water. Dry sterile dressing. Penicillin. Tag.

IV. Laceration:
1. FAP
   (a) If minor, dry sterile dressing. Evacuate to CCS.
   (b) If large or deep, control bleeding by firm pressure exerted through large compresses. Evacuate to CCS by litter.
   (c) If small evisceration, dry sterile dressing. Evacuate to CCS by litter.
   (d) If large evisceration, return bowel to mid abdomen. Dry sterile dressing. Snug binder. Evacuate to CCS by litter.
   (e) If any possibility of penetration, treat as small evisceration (c).
2. CCS
   (a) If no deep involvement, wash with tap water. Suture. Penicillin. Dry sterile dressing. Tag.
   (b) If any possibility of penetration, wash with tap water. Dry sterile dressing. Penicillin. Tag. Evacuate to hospital.
   (c) For laceration with small evisceration and no evidence of shock, same treatment as for penetration (b). If in shock, refer to shock team before evacuation.
   (d) Laceration with gross evisceration. Return viscera to mid abdomen. Apply moist compresses and snug binder. Penicillin. Tag. If shock is present, refer for treatment. If not, evacuate to hospital at once.

Low Back and Buttocks.—

I. Abrasion:
1. FAP
   (a) No treatment. To CCS by litter if major injury.
2. CCS
   (a) Same as Abrasions to Abdomen.
   (b) If major and involving perineum, evacuate to hospital.

II. Contusion:
1. FAP
   (a) No treatment. Evacuate to CCS by litter if major.
2. CCS
   (a) Examine for fracture of spine, transverse process, possible renal injury, or possible intra-abdominal complication.
   (b) If minor, no treatment. Tag.
   (c) If major (possibility of deep damage), evacuate to hospital by litter. (See Fracture of Vertebral Column and Genito-Urinary section.)

III. Puncture Wounds:
1. FAP
   (a) If minor, no treatment.
   (b) If major, dry sterile dressing. Evacuate by litter to CCS.
2. CCS
   (a) Minor: Wash with tap water. Dry sterile dressing. Penicillin. Tag.
   (b) Major: Check for renal injury, intra-abdominal injury, injury to pelvic rectum, or sciatic nerve.
   (c) Treat as for minor injury (a) and evacuate to hospital. (If shock is present, however, refer to shock group.)

IV. Lacerations:
1. FAP
   (a) Minor: No treatment. To CCS.
   (b) Major: Dry sterile dressing. Evacuate by litter to CCS.
2. CCS
   (a) Minor: Wash with tap water. Suture if indicated. Dry sterile dressing. Penicillin. Tag.
   (b) Major: Check for renal injury, peritoneal penetration, rectal injury or injury to sciatic nerve.
   (c) If uncomplicated, same as for minor injury
      (a) with attention to deep bleeding.
   (d) If complicated, wash with tap water.

Control deep bleeding. Dry sterile dressing. Penicillin. Evacuate to hospital if no shock. (If shock is present, refer to shock group.)

Perineum.—

I. Great potential danger if injury to male and female genitalia, rectum, and urethra.

II. Treatment at FAP and CCS levels essentially as for Abdomen and Low Back and Buttocks. (See section on Urology.)

Upper Extremity.—

I. Abrasions:
   1. FAP
      (a) Minor: No treatment.
      (b) Major: Dry sterile dressing, sling. Refer to CCS.
   2. CCS
      (a) Minor: Wash with tap water. Dry sterile dressing. (If some depth, use vaseline gauze.) Penicillin. Sling if at or near elbow. Tag.
      (b) Major: If contused, check for fracture or dislocation. If of some depth and size, treat as burn. (See section on Burns.)
      (c) If any possibility of fracture, apply sling and refer to Fracture Group.

II. Contusions:
   1. FAP
      (a) Minor: No treatment.
      (b) Major: Sling. To CCS.
   2. CCS
      (a) Minor: Sling. Tag.
      (b) Major: Check for fracture and dislocation. If clinical suspicion of either, refer to Fracture Group. If not present or suspected, apply sling.

III. Avulsions of Arm:
   1. FAP
      (a) Control of hemorrhage imperative. Tourniquet or continuous, firm manual pressure over heavy compress or even patient's clothing may be necessary.
      (b) Evacuate by litter to CCS.
   2. CCS
      (a) If shock is present and no bleeding, wash gently with tap water. Dry sterile dressing. Penicillin. Refer for shock therapy. Then evacuate by litter to hospital.
      (b) If shock is present and bleeding (with or without prior dressing), remove dressings. Control gross bleeding with hemostats and ligation. Wash gently with detergent soap. Dry sterile dressing. Penicillin. Refer for shock therapy.
      (c) If no shock and previous dressing, penicillin. Evacuate to hospital.
      (d) If no shock and no previous dressing, wash with tap water. Firm, dry sterile dressing. Penicillin. Evacuate to hospital.

IV. Sprain (Wrist):
   1. FAP
      (a) If no question of fracture, firm dressing.
      (b) If question of fracture, evacuate to CCS.
   2. CCS
      (a) If no fracture or dislocation, apply firm dressing. Tag.
      (b) If question of fracture or dislocation, sling. Refer to Fracture Group.

V. Puncture Wounds:
   Dangerous in arm because of superficial location of vessels and nerves in axilla, arm, elbow, and wrist.
   1. FAP
      (a) Minor: Dry sterile dressing. Evacuate to CCS.
      (b) Major (vessel or nerve involvement) with bleeding, apply firm compress to control. Dressing. Evacuate to CCS.
      (c) If hemostats not satisfactory, apply tourniquet proximal to wound. Dry sterile dressing. Evacuate to CCS.
      (d) If nerve involvement, dressing as above. Sling. Evacuate to CCS.
   2. CCS
      (a) Whether major or minor, check for large vessel and nerve involvement.
      (b) Minor without complication: Wash area with tap water. Dry sterile dressing. Penicillin. Tag.
      (c) Minor with hemorrhage, from non-vital vessel:
         (1) Wash with tap water.
         (2) Open wound if necessary, isolate vessel or vessels and ligate.
         (3) Suture wound.
         (4) Dry sterile dressing.
         (5) Penicillin.
         (6) Tag.
      (d) Minor or major with hemorrhage from axillary or high brachial vessels:
         (1) Wash with tap water.
         (2) Firm, sterile compress pressure bandage for hemostasis.
         (3) Penicillin.
         (4) Evacuate to hospital for vascular surgery.
         (5) If evacuation to hospital (4) is impossible, anesthetize, open wound for exposure, re-anastomose arteries, ligate veins.
         (6) If necessary to control bleeding, hemostats may be applied with or without ligation and then patient evacuated to hospital for further care.
      (e) If minor or major with severance of nerve alone,
         (1) Wash with tap water.
         (2) Dry sterile dressing.

(3) Penicillin.
(4) Sling to forearm and/or hand.
(5) Advise concerning secondary care.
(6) Tag.

(f) If minor or major with hemorrhage and nerve section,
(1) As above plus primary neurorrhaphy. (See section on Peripheral Nerves.)

VI. Hand:
1. FAP
(a) No treatment.
2. CCS
(a) Wash with tap water.
(b) Minimal debridement, if any.
(c) Cover exposed bone or tendon with skin (if at all possible) by suture.
(d) Dry sterile dressing in position of function.
(e) Penicillin.
(f) Advise concerning later definitive care.
(g) Tag.

Lower Extremity.—

I. Abrasions:
1. FAP
(a) Minor: No treatment.
(b) Major: Dry sterile dressing. Evacuate to CCS. (By litter if necessary).
2. CCS
(a) As for Upper Extremity.
(b) Crutches instead of sling.

II. Contusions:
1. FAP
(a) As for Upper Extremity.
(b) Substitute crutches for sling.
2. CCS
(a) Minor: No treatment.
(b) Major: As for Upper Extremity.
(c) Crutches for ambulation.

III. Traumatic Amputation of All or Part:
1. FAP
(a) As for avulsion of arm.
(b) Tourniquet application if necessary.
(c) Evacuation to CCS.
2. CCS
(a) Toes: Wash with tap water. Dry sterile dressing. Penicillin. Crutches if necessary. Advise concerning definitive care. Tag.
(b) Portion of foot: As for toes, except apply pressure bandage.
(c) Involving tibia: As above. Ligate vessels if necessary. Evacuate to hospital if no shock. If in shock, refer for therapy.
(d) Involving femur: Same as tibia.

IV. Puncture Wounds:
Dangerous in high anterior thigh where femoral vessels and nerves are quite superficial; also popliteal area. Common femoral artery and popliteal artery are vital.
1. FAP
(a) As for Upper Extremity.
(b) Tourniquet useless above mid-thigh. Use firm pressure for hemostats over bleeding point. (Continuous manual pressure if necessary.)
(c) To CCS by litter.
2. CCS
(a) Same as for Upper Extremity. Deep bleeding may be difficult to detect in thigh.
(b) Joint perforation through small puncture wound may be ignored. Patient should be warned of possible complication of hemorrhage, effusion, and infection. Tag for treatment on third to fourth day.
(c) If large puncture wound, close skin with suture to prevent further contamination.

V. Laceration:
1. FAP
(a) Minor: Dry sterile dressing.
(b) If of considerable length and/or depth, but not into muscle bellies, tendons of foot, knee or ankle joint, and uncomplicated by hemorrhage: Firm sterile dressing. Evacuate to CCS, walking.
(c) If complicated by hemorrhage, apply large compress with pressure. If to no avail, apply proximal tourniquet and redress with large firm sterile dressing.
(d) For hemorrhage above mid-thigh, continuous manual pressure over laceration may be necessary. Maintain during evacuation.
2. CCS
(a) Minor laceration: Wash with tap water. Dry sterile dressing. Penicillin. Tag.
(b) For laceration of some depth and/or length, as above. Suture or adhesive tape coaptation.
(c) For laceration near knee, check for joint penetration. If present, wash with tap water. Dry sterile dressing. Penicillin. Evacuate to hospital for further care.
(d) For laceration of foot with severance of tendons, wash with tap water. Dry sterile dressing. Penicillin. Advise concerning later definitive care. Tag.
(e) For laceration with deep bleeding from non-critical area, wash with tap water. Ligate bleeding vessels, muscle, and skin. Close wound by suture. Dry sterile dressing. Penicillin. Crutches. Tag.
(f) For laceration involving common or superficial femoral and popliteal arteries, obtain hemostasis by tourniquet, pressure bandage, or by maintained manual pressure over compresses. (Hemostats may be placed on vessel ends if necessary.) Penicillin. Evacuate to hospital as soon as possible. If impossible to evacuate to hospital, these vessels should be re-anastomosed in CCS as soon as possible as they are vital to life of the limb.
(g) For laceration with section of nerves, see section on Peripheral Nerves.

First Aid for Simple Fractures

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IT IS ASSUMED in presenting this simplified outline of first aid as related to bone and joint injuries that the first aid attendant has had at least a superficial course in first aid and has some knowledge of the treatment of wounds and the application of splints.

Skull.—

I. Keep patient lying down with head and shoulders slightly raised if face is of normal color or flushed. If pale, keep level or head slightly lower.

II. Move only in a horizontal position and avoid unnecessary handling.

III. Do not give stimulants or anything by mouth. Keep warm.

IV. If blood or mucus collects in throat, lower head and turn slightly to the side.

V. Control bleeding from the scalp by applying a sterile pad and direct pressure over the bleeding point. Apply head bandage.

VI. If breathing ceases and pulse is still felt, institute artificial respiration.

Spine.—

I. Neck:

1. Do not move or lift patient's head to the back, side, or forward.
2. If moved, maintain slight traction on the head in a longitudinal axis. Place sand bags or pillows on either side of the head after the patient has been placed on a rigid flat surfaced splint that extends well out beyond his head, e.g., a door. Place arms at side and then "mummify" the patient to the splint so that no motion of the spine is possible.

II. Lower Spine:

1. Transport lying on the back with a pillow under the small of the back. Use a flat surface rigid splint.
2. Never lift into or allow patient to assume a sitting position.

Pelvis.—

I. Transport in the lying position on a rigid splint. Tie ankles together before moving onto splint.

Lower Extremity.—

I. Hip and Femur:

1. Steady the limb by grasping the foot and ankle. Apply gentle traction and move the limb into a normal position so it is at the side of the body. Hold it there.
2. Apply the Thomas splint, or a long board splint from the armpit to the ankle, or tie the limbs together and use the opposite limb as a splint.

II. Knee Cap:

1. Straighten the extremity. Apply the Thomas splint or a straight board from the buttock to the heel, padding well under the knee.

III. Leg:

1. Grasp the foot or ankle and apply gentle traction. Apply the Thomas splint or a straight board from the thigh to the foot.

IV. Ankle and Foot:

1. Place a large padded dressing around the ankle or foot and apply an ascending bandage.
2. Keep patient off the extremity.

Upper Extremity.—

I. Clavicle:

1. Place arm and forearm in a sling with the elbow flexed to 90 degrees. Then with another sling bind the arm to the side.

II. Arm:

1. Place the arm in a normal position in relation with the body with the elbow straight. Then apply a Murray-Jones splint with mild traction.

III. Elbow:

1. If the elbow is flexed, carefully apply an arm sling and then bind the arm to the body. A sling may be used around the neck and wrist to help support the elbow.
2. If the elbow is straight, place the arm in a normal position and apply the Murray-Jones splint without traction.

IV. Forearm and Wrist:

3. With the patient's hand out straight, splint the forearm out straight using two long basswood splints, padding being applied over the fracture site before the splints are secured in place with roller bandage or triangular bandages.

Generally speaking, improvised splints may be used, and will have to be used whenever "formal splints or splinting material" is not available. It is an accepted rule that the first regulation in the first aid of fractures is to "splint them where they lie." It is the purpose of the first aid attendant to prevent any further damage to the injured extremity at the time he first sees him or until he can be safely transported to a hospital for definitive care.

The Emergency Treatment of Fractures (Casualty Care Station)

In the treatment of various types of fractures, it is difficult to plan any standardized method that might be adequate for all types of cases. There are many fractures that present very special problems, and the proper method of treatment for such cases can only be determined after careful evaluation of these factors.

However, in dealing with a large number of casualties, one must plan some uniform care. We shall first consider simple fractures:

1. All simple fractures with no displacement should be immobilized immediately in circular plaster cast.

2. All fractures of long bones with displacement, should be treated by skeletal traction.

3. Oblique fractures of long bones with displacement, may be treated with open reduction and internal fixation, if trained personnel and facilties are available.

4. Fracture-dislocations, unless trained personnel is present, are best treated by skeletal traction.

5. After a period of time in skeletal traction and when healing begins to take place as shown by x-ray, then these cases should be immobilized in circular plaster casts. The pins may be incorporated in cast to maintain traction if necessary. Many of these cases can be immobilized as soon as bone position is satisfactory.

Condylar fractures of lower humerus, fractures of condyles of tibia and tri-malleolar fractures of lower tibia are best treated by open reduction and internal fixation with screws if facilities and trained personnel are present.

Compound Fractures.—In treatment of compound fractures, proper debridement is of the greatest importance. Skeletal traction is the safest and simplest method of mass treatment of compound fractures of long bones.

The completeness of wound excision unquestionably is one of the determining factors of the end result in treatment of such cases. The surgical clean-up and preparation of the wound begins when the patient enters the operating room. After the patient is anesthetized, the logical order of procedure is as follows:

1. Traction is maintained while the clothing is cut away or removed.

2. The wound is protected by a sterile dressing.

3. An air inflated tourniquet is applied if possible to control hemorrhage if severe.

4. With the wound and fragments protected by sterile dressings, the surrounding skin of the extremity is shaved and cleansed with soap and water and a brush for ten minutes, using sterile brushes and irrigating with warm saline or water. No antiseptic or soap is allowed to enter the wound.

5. Traction is maintained while sterile drapes are applied to the extremity.

6. The skin edges are excised approximately 0.5 cm. around the entire wound. The wound is extended longitudinally so that thorough inspection of soft tissue damage can be accomplished. All viable skin is saved.

7. The wound edges are then protected with sterile towels.

8. Warm, sterile saline irrigation of the wound is continued during the debridement in which all contused, traumatized, dead, and contaminated soft tissue is excised. Black dark areas of muscle should be excised down to fresh bleeding surfaces. All hematomats are removed, and loose, small fragments of bone which are devoid of periosteal or soft tissue attachments are excised. Large cylinders of bone should never be excised or removed. Soiled and stained bone ends are carefully rongeured. No force should be used to irrigate, rather allowing the fluid to gravitate out of the wound.

9. Nerves and tendons, which retract and are later difficult to locate, should be preserved and reunited in a simple manner after the debridement.

Primary closure may be considered after a good surgical debridement if:

(a) The soft tissue injury is not severe and antibiotic or chemotherapy has been instituted early.

(b) The time interval between the injury and surgical clean-up has not been unduly prolonged.

(c) Contamination of the wound has not been severe, and has been properly alleviated.

(d) The circulation of the extremity is not severely injured.

(e) The skin can be closed without tension.

Primary closure should never be attempted if:

(a) The wound is very extensive, dirty, and difficult to debride.

(b) Extensive soft tissue and bone damage is present.

(c) Debridement has been delayed more than eight to twelve hours.

(d) Circulation is embarrassed.

(e) Skin cannot be closed without tension.

10. When the wound cannot be closed, it should be covered by loosely packed non-adherent sterile vaseline gauze and a mild pressure dressing held in place by a plaster-of-Paris cast, split from end to end. This should not be disturbed for seven to ten days unless evidence of infection intervenes.

11. If the wound is clean in seven to ten days, a split skin graft may be applied to close the wound.

12. Length and position need not be sacrificed, if the principles of traction, counter traction, and immobilization of the joint above and below the fracture, are kept in mind. Skeletal traction appropriately applied, distant to the wound, supported by a plaster cast, and swung up under an orthopedic bed with ropes and pulleys for suspension are, generally speaking, preferable to immediate internal fixation.

Antibiotics should be administered in full dosage.

The possibility of gas gangrene must be remembered at all times. Adequate debridement, with removal of all dead and devitalized tissue, especially muscle, is the best prophylaxis. Rapid pulse, fever, appearance of toxicity developing in the early period after compound fractures should raise the question of gas gangrene. The wound should be inspected if this suspicion is present. Excision of affected tissues, large doses of antibiotics, use of antitoxin are valued in treatment. Get expert help for treatment of gas gangrene if possible.

Tetanus antitoxin should be given unless individual has had toxoid, in which case a "booster dose" of toxoid should be given.

Fractures of Spine.—Fractures of cervical spine should be treated by traction, using Crutchfield tongs or head halter for fixation. The tongs are preferable.

Fractures of dorsal and lumbar spine should be treated by hyperextension, and immobilized in hyperextension plaster jacket, unless contraindicated by spinal cord injuries or some unusual type of fracture.

Treatment of Penetrating Joint Injuries

If there is a penetrating or perforating wound of the joint, wide surgical exposure of the joint should be done as early as possible through one or more incisions with careful excision of damaged soft tissue and cartilage with the removal of all available foreign bodies. The joint cavity should be thoroughly irrigated with sterile saline. The synovial membrane and capsule should be closed by any possible means with instillation of the proper antibiotics into the closed cavity. The skin and superficial tissues should be left open widely, while the extremity is enclosed in a plaster-of-Paris splint, with a window cut out over the wound. The joint should be aspirated in twenty-four to forty-eight hours and antibiotics re-instilled. Closure of the superficial wound by suture or skin graft can often be accomplished in three to five days after the above treatment.

Emergency Amputation

Amputations among casualties are resorted to only when an extremity is irretrievably damaged or a nearly complete traumatic amputation has been performed by the wounding missile. Complete destruction of the blood supply to an extremity usually means amputation is inevitable. An open circular amputation performed at the most distal point possible is probably safest. A circular incision is planned so as to avoid needless sacrifice of skin and subcutaneous fat and these tissues allowed to retract. The deep fascia is then incised at the level to which the skin has retracted. The superficial muscles are divided on a level with the incised deep fascia and permitted to retract. The deep muscles are then cut through to the bone at the level to which the superficial muscles retracted. Periosteum is incised with a scalpel and the bone divided with the saw at the deep muscle retraction. Careful attention should be directed at avoiding stripping or injury to the periosteum. Arteries and veins are individually ligated, transfixation ligatures being placed distal to initial simple ligatures. Skin traction is immediately applied.

Management of Chest Injuries from Atomic Bombing

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THE RECORDED experiences from the Hiroshima and Nagasaki bombings indicate that the survivors of an atomic explosion manifest direct blast injuries in a far lower percentage of cases than individuals exposed to the detonation of high explosive powders. The incidence of ruptured ear drums among survivors at Hiroshima and Nagasaki, for example, was about 1 per cent in contrast to a much higher incidence in survivors of the Texas City disaster caused by explosion of ammonium nitrate. Serious direct blast effects on the lungs are believed to be of similarly low incidence in atomic bomb casualties in contrast to indirect chest injuries produced by the collapse of buildings and by flying glass. It is anticipated, therefore, that the majority of chest casualties following atomic bombing will consist of the more familiar types of traumatic cases encountered in civilian life involving direct contusion of the chest with associated rib fracture, pneumothorax, hemothorax and lung contusion in the severe traumatisms. Effects on the lung may also occur in connection with burns about the face or from inhalation of smoke from fire.

Although air blast injuries may not be common, emphasis should be placed on recognition since such casualties may present a deceptively good appearance in the early phase when serious damage actually has occurred. The main symptoms are pain or oppression beneath the sternum, dyspnea, harassing cough, and hemoptysis. Physical examination may reveal few signs on auscultation initially, and observation of respiration and other vital signs in conjunction with the history is important. The occurrence of deafness or demonstration of rupture of the tympanic membranes confirms exposure to air blast. *Rest with the head slightly elevated* and *morphine* constitute the early treatment. *Oxygen* is urgently required whenever dyspnea is increasing.

It should be stressed that pulmonary injury produced by smoke or fire may also appear to be of minor consequence during the first few hours only to be followed by serious pulmonary edema. Substernal oppression, dyspnea, harassing cough and expectoration of frothy sputum are ominous signs and warrant the same management accorded to air blast casualties. *Super-imposed infections may occur in all pulmonary injuries, usually after forty-eight hours,* and it is *a good working rule to administer penicillin to all patients who exhibit râles or areas of percussion dullness.*

ACTH, Cortisone and Adrenal Cortex Therapy

The usefulness of adrenocorticotropic hormone, cortisone, and adrenal cortex extracts in the management of atomic casualties is not known. The limited evidence available suggests that all of these agents have the capacity to support life in the extremis, whether it is threatened by almost overwhelming trauma, burns or infection. Attention is further directed to the regularity with which atrophy of the adrenal cortex was encountered in Japanese casualties succumbing two weeks or more after exposure. Extracts of adrenal cortex may be administered with scant regard to possible adverse effects, but the production of potent preparations will be limited by expense for some time to come. Therefore, the major question concerns the advisability of employing cortisone or ACTH which are currently available in quantity. The adverse side effects of ACTH and cortisone make it certain that wholesale administration of either substance would result in more harm than benefit. For example, these compounds break down the barriers to spread of infection. They are probably contraindicated in hypertension, which is known to be a common temporary phenomenon in persons exposed to catastrophic disasters, and the potentially harmful effects of ACTH or cortisone on the diabetic, nephritic or ulcer patient are also well known. It is therefore recommended that ACTH and cortisone be not advised as a measure of routine therapy for atomic casualties but that these agents be reserved as a possible adjunct in the management of selected cases under the close supervision of qualified senior physicians.

Management of Infection

Infection in a variety of forms plays an important role in atomic casualties. Burn cases, traumatic casualties and radiation injury cases alike may succumb to secondary infections. Defenses against infection are lowered by the granulocytopenia produced by irradiation and additional por-

tals of entry may be provided by ulcerations in mouth and pharynx, by radiation induced denudation of gastrointestinal surfaces, and by hemorrhagic foci in the lungs. Partenterally administered procaine penicillin is the cheapest, most available and most easily administered antibiotic agent. Its utility, however, may be definitely less than that of aureomycin, terramycin or chloramphenicol, particularly where the gastrointestinal tract is concerned. It is recommended that procaine penicillin be administered by daily intramuscular injection to all casualty cases in which infection may be anticipated, the dosage preferably being at least 500,000 to 600,000 units daily. Aureomycin, terramycin and chloramphenicol when available may also be employed by the oral route in divided doses of approximately 500 mg. every eight hours. These antibiotic agents affect a wider bacterial spectrum than penicillin and are definitely preferred when gastrointestinal ulceration is present. In the presence of active infection it may, of course, be necessary to employ larger doses of antibiotics, and it is self evident that the particular agent employed be selected whenever the bacterial agent concerned can be identified. Simultaneous administration of two or more antibiotic agents lacks firm scientific support, and in this connection it may be remarked that aureomycin, chloromycetin and terramycin all possess the capacity to interfere with the antibacterial action of penicillin. When sheer desperation prompts resort to the application of multiple anti-infective agents, we recommend that streptomycin be one of the two antibiotics because of its demonstrated capacity to reinforce rather than interfere with the other antibiotics.

Surgical Injury of the Thorax

Traumatic injuries of the thorax will fall mainly into two classes, namely, penetrating and non-penetrating wounds. It is highly probable that in the case of bombing the type of injury seen will be mainly of the non-penetrating type. Contusion of the chest wall with or without fracture of ribs or other boney structures can give rise to serious intrapleural damage. It must be remembered that it is possible to have a pneumothorax which may be of the tension type even in the absence of disruption of the chest wall. Such patients should be treated promptly with the aspiration of air and of blood if it is present.

Individuals with severe chest wall contusion and also with penetrating wounds of the chest are liable to develop severe pulmonary edema, setting up a symptom complex which is known as "the wet lung of trauma." In order to break up the reflex nerve chain which is thought to cause this disorder, it is necessary that intercostal nerve block be employed.

Fractures of the ribs have long been treated by circular strapping of the chest. It is now thought that this is probably an unnecessary, and in many instances a useless, type of procedure. The main point to remember in treating such injuries is that pain is relieved by intercostal block in order that the patient may cough with ease and freedom, because the serious consequences which follow this type of injury are in the main directly related to the patient's inability to keep the airways clear. If there is intrapleural injury, producing either tension pneumothorax or hemothorax, these must be promptly cared for by aspiration, and if the rent in the lung is large, the employment of an intercostal catheter drainage attached to a closed drainage bottle may be needed.

As was stated earlier, penetrating wounds of the chest may not be commonly seen, but they will undoubtedly occur in some instances being caused by flying particles of steel and of sharp-edged pieces of masonry. If the injury to the chest wall is severe and a sucking wound is present, an airtight dressing should be attached securely over the wound and the patient transported as quickly as possible. The mere presence of a foreign body within the lung does not call for its immediate removal. In fact, it has been shown that such removal is carried out with better results after a variable period of waiting in order that the lung hematoma may clear.

Hemothorax should be treated by its immediate evacuation without the replacement of air. It should be remembered that while the initial hemorrhage from a lung wound may be great, the bleeding stops rather rapidly and secondary hemorrhage is rare. It is therefore rarely necessary to do an open thoracotomy in order to control a lung wound. Bleeding which is coming from a severed intercostal or some other large vessel will of course require definitive treatment. If the blood becomes clotted within the pleural space, it is better to leave it so for a period of time when either a chemical or surgical decortication can be done. Wounds of the mediastinum and those of the lower

(Continued on Page 334)

Trauma of the Nervous System

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Acute Craniocerebral Injury

General Principles of Treatment.—

Observation of Patient.—Careful evaluation in order to anticipate complications (subdural, epidural hematoma and hydroma).

This requires:

1. Primary and secondary neurologic examinations, particularly observing the state of consciousness.
2. Recording pulse, respiration, blood pressure every half hour and temperature every two hours. In seriously ill patients recording of the fluid intake and output, the diet's caloric and protein values, and the patient's weight.
3. Diagnostic lumbar puncture.
4. Attention to all associated injuries.

Oxygen Content of Blood.—Maintenance of an adequate oxygen saturation of the blood. This may be brought about by:

1. Positioning of the air passages so that obstruction is avoided: (a) elevate lower jaw, (b) turn head to one side, (c) slight semi-Fowler's position. (Place in position where respirations are least labored).
2. Aspiration of all mucus from the upper air passages and by positioning body so that mucus will be expelled by gravity (head lower than body).
3. The use of oxygen by means of a nasal catheter rather than oxygen tent (in order that nursing care, aspiration of mucus, et cetera, may be constantly done).

Temperature.—Elevation in temperature may be controlled by:

1. Exposing the body surface in order to radiate heat. Don't cover the patient with blankets, a pneumonia jacket and shoulder blanket to place him in a chilled oxygen tent. This elevates the temperature.
2. The use of tepid sponges and ice water enemas in order to maintain a temperature below 103° F.

Nourishment.—The requirements in fluid and food may be maintained by:

1. A fluid intake of 2,400 to 3,000 cc. daily when a significant elevation of temperature is not occurring. If temperature above 100° F., add 1,000 cc. for every 2 degrees of increase. In the seriously ill patient, maintain 1,500 cc. urinary output every twenty-four hours.
2. Administration of fluids and food (twenty-four hours from time of injury) preferably by means of a nasal feeding tube (in the unconscious patient).
3. The food must contain adequate caloric, protein and vitamin values for the child or adult (2,000 calories in 2,500 cc. of a combination of water, milk, sugar, eggs and vitamins).

Comfort of Patient.—Rest and comfort may be provided by:

1. The employment of special nurses or attendants when possible in the acutely sick patient.
2. Analgesics and sedatives, preferably pentobarbital sodium (nembutal) 90 mg. (1½ grains) alternating with codeine 60 mg. (1 grain) used freely when necessary.
3. Freedom from restraints as far as possible.
4. The avoidance of a distended bladder and incontinence by an indwelling catheter or condom attached to a drainage tube and bottle.
5. The use of an enema every third day.
6. Insistence upon cleanliness of the skin and the body orifices.
7. Elevation of the head.
8. Avoidance of stimuli (noise, light and relatives).
9. Ice bag to the head, if desired.

Other Measures.—Specific measures other than supportive and nursing care may require:

1. The use of penicillin and/or sulfadiazine as a prophylactic measure either routinely or when the frontal or temporal base is fractured. Penicillin may be used routinely in postoperative patient.
2. Physiotherapy to paretic and paraplegic extremities in the early period of injury.
3. Occupational therapy as soon as practical.
4. Discussion with and instruction of the patient in order to provide him with a reasonable viewpoint concerning sequelae.

The principles presented in this article apply to care in the Casualty Care Station or in institutions equipped for more definitive care.

Special Measures in Treatment of Complications.—

Scalp Lacerations.—May be treated by:

1. A wide and adequate preparation of the surrounding scalp by shaving, soap, water, ether and alcohol.
2. The insertion of a finger covered by a sterile glove into the wound in order to assess the underlying skull damage.
3. Suture by silk using 1 per cent procaine anesthesia.

Compound Fracture of the Skull.—This requires:

1. Detailed roentgen studies before operation to determine the degree and position of comminution.
2. Early operation (emergency) within twelve hours.
3. Penicillin, 30,000 units every three hours from the time of admission.
4. Neurosurgical technique of operation employing the complete facilities of modern surgery. This applies to all of the following procedures which may, at any time, demand the maximum in skill and armamentarium. They should be available.

Simple Depressed Fracture of the Skull.—May be treated by using the following principles:

1. Election of time for operation allowing patient to recover from the initial effect of injury.
2. Early operation if "dynamic" signs occur such as progressive lethargy and stupor or Jacksonian convulsions.
3. Management in latter event as in compound fracture.

Subdural Hematomas (Acute and Chronic) and Subdural Hydroma.—Acute cases may require:

1. Operation as soon as possible after diagnosis has been made.
2. The use of two trephine openings in the frontal area, left and right, as exploratory openings.
3. Counter drainage if and as required.
4. The injection of air into the ventricular system for a ventriculogram if a suspected collection is not found. This is in preference to further multiple openings.
5. Trephine then as directed by the ventriculogram. Chronic cases may require:
   (a) Management as an elective case usually preceded by an air study.
   (b) Exploratory trephination to identify lesion.
   (c) Drainage of a liquid collection by appropriate counter opening.
   (d) Removal of a solid collection by means of a suitable bone flap.

Epidural Hematoma.—Should be treated as follows:

1. Early operation as soon as diagnosis is made.
2. The use of a subtemporal opening for removal of the collection.
3. The effort is made to remove only as much bone as necessary to evacuate the clot.

Massive Intracerebral Hemorrhage.—This requires:

1. Early operation after the diagnosis and localization of the lesion.
2. A cortical incision is made for evacuation of the clot which is usually accidentally identified through an opening made for removing an epidural hemorrhage.
3. A craniotomy flap is suitable if a diagnosis is made by means of a brain cannula tap through a trephine opening.

Brain Abscess.—May be treated as follows:

1. Early operation in abscess complicating "open" cranial wounds with total "debridement" of the purulent collection rather than drainage. (Example — abscess following shell fragment wounds of war.)
2. Delayed treatment to encourage encapsulation in abscess following "closed" injuries, complicating sinus fractures.
   (a) Initial tap of the abscess with instillation of penicillin. Multiple taps may be curative.
   (b) Removal of the encapsulated abscess by craniotomy if necessary.

Spinal Cord Injury

The effective treatment of patients with involvement of the spinal cord or the cauda equina involves the acceptance of the principle that a productive life may be compatible with great neurologic deficiency, that hopelessness cannot be accepted as a reason for indifferent care. Two main classes of injury occur.

1. Closed injuries of the spinal cord or cauda equina produced by fracture.

2. Open or penetrating wounds of the spinal cord or cauda equina produced by high or low velocity missiles, e.g., metal fragments, knife stabs.

General principles of care apply to both groups and these must be meticulously followed. Some injuries in Group 1 may require surgical treatment. All in Group 2 should be surgically treated. The indications for such therapy are considered under separate headings.

General Principles of Care.—

Transportation of the patient to a point for definite treatment under suitable conditions.

1. Movement of the spine must be avoided.

2. A position of extension must be provided. This is most simply executed by placing the patient in a prone position on a stretcher.

3. If delay in transportation occurs, catheter bladder drainage should be established and the patient instructed regarding bladder emptying.

Diagnosis.—

1. Upon reaching a point where definite treatment may be initiated, a careful examination is first made and recorded. Notation is made concerning the deep tendon reflexes, abnormal reflexes, the sensory loss and sphincter disturbance.

2. Diagnostic roentgen studies may be made upon admission to avoid subsequent movement of the patient.

3. A careful Queckenstedt examination is made to determine the presence or absence of cerebrospinal fluid block either partial or complete. The use of contrast media studies (pantopaque) may be desirable.

4. An indwelling catheter is inserted if this has not already been carried out.

5. Decision is made concerning the indication for surgical or conservative treatment.

Surgical Treatment.—

1. Group 1 patients may be treated by laminectomy if a spinal block is present upon manometric study. The presence of comminuted loose fragments compressing dura and spinal cord may require laminectomy. Rapid hyperextension may be employed in place of early laminectomy. A persistent block may require decompression by laminectomy. Cervical dislocations are treated by means of traction with Crutchfield tongs.

2. Group 2 patients must have debridement of the soft tissue wounds as soon as practical. Definite debridement of the spine wound must be done only under ideal conditions employing modern facilities and skill. Indications for laminectomy include the presence of bone fragments or metallic fragments within the spinal canal. A spinal fluid block or spinal fluid leak requires laminectomy.

3. In Groups 1 and 2 a progressive or dynamic increase in neurologic signs requires surgical exploration at the level of injury as soon as practical.

Conservative Treatment.—

1. Care of the skin.

(a) The patient may be placed upon a Stryker frame and turned every two hours. If such or similar frame is not available, frequent changing of position in bed is essential. Air mattress may minimize bed sores.

(b) The skin is kept dry and clean.

(c) Hyperextension casts must be bivalved as soon as possible and the upper half removed at each turning.

(d) All pressure points must be avoided.

(e) Decubiti are treated by exposure to light and excision.

2. Care of the bladder.

(a) An indwelling catheter may be inserted. During catastrophic situations suprapubic drainage may be established to avoid accidents of urethral catheter removal during delayed transportation.

(b) A tidal drainage apparatus is employed in conjunction with the indwelling catheter. The patient may be trained to irrigate his bladder manually twice or three times daily with boric solution.

(c) Sulfadiazine, 1 gram (15 grains) three times daily, is used to prevent bladder infection.

(d) The catheter is removed, cleaned and sterilized and reinserted every ten to fourteen days.

(e) The head of the bed or Stryker frame is elevated.

3. Care of the morale. The patient is encouraged from the outset to help himself in personal care, moving and turning. He is instructed early in the fundamentals of rehabilitation. The

physical and vocational therapists must begin their program as soon as the patient can be moved to an area where this is possible.

4. Rehabilitation.

Peripheral Nerve Injury

The treatment of peripheral nerve injuries is contingent upon an early recognition of interruption of function. Several fundamental surgical principles may then be applied. The optimim result of surgical treatment is closely dependent upon the mobility of the affected part which can be maintained only by exercise. There are two main classes of nerve interruption: 1. Anatomic. 2. Physiologic.

General Principles of Care.—

Anatomic Interruption. Nerve Division.—Lacerations of the extremities may result in division of peripheral nerves either completely or partially. Such nerve divisions are suitably treated by "primary" suture under satisfactory operating conditions. (If such conditions do not obtain, a "secondary" suture is performed three to six weeks after injury).

Nerve and Tissue Injuries.—High velocity missiles produce injuries to nerves surrounding tissue. This is best managed by "debridement" of the soft tissue and approximation of the nerve ends, if divided, by means of a single "sling" suture. The wound is allowed to remain open, covered with petrolatum gauze, the patient evacuated for further care. (A "secondary closure" of the wound is then performed within ten days after injury. Three to six weeks later a "secondary" nerve suture is then made. Within this period the devitalized portion of the nerve becomes demarcated and the epineurium is thickened, permitting more secure suturing). In both primary and secondary nerve suture the affected part is splinted until wound healing occurs.

Infection.—In infected cases it is preferable to treat infection and perform neurorrhaphy six weeks after the wound has completely healed.

Surgical Treatment.—Definitive surgical treatment of the interrupted nerve employs those measures which produce the ideal environment for axonal growth both internally (within the nerve sheath) and externally, including the following:

1. Silk or fine tantalum wire may be used for approximation.

2. The approximation is made without undue tension.

3. By means of long incisions adequate exposure of the nerve permits freeing of the trunk in order to overcome gaps due to loss of substance.

4. The details of surgical technique follow accepted neurosurgical principles. Operation is usually performed under local or general anesthesia with complete equipment which includes an electrical stimulator.

Physiologic Interruption.—The function of a peripheral nerve may be disturbed by "closed" injuries including a blunt force and the contusion or stretching associated with fracture and/or dislocation of a bone of an extremity. High velocity missiles may produce a molecular dissolution of the nerve fibers without actual contact. A neuroma in continuity or extrinsic nerve scarring and callus inclusion may slowly interrupt the transmission of impulses. Treatment requires careful observation of the patient's disability to determine the presence or absence of improvements in sudomotor, sensory or motor function by individuals expert in this field.

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MANAGEMENT OF CHEST INJURIES FROM ATOMIC BOMBING

(Continued from Page 330)

chest in which the diaphragm may be involved likewise require immediate and definitive care. Superficial wounds of the chest wall should be debrided and, in contradistinction to other wounds, should be primarily closed.

In the main, therefore, the immediate treatment of the chest wound should involve such measures as are necessary to restore the patient's pulmonary physiology to as near a normal state as possible. If shock is present, blood or blood substitutes should be given. The large majority of chest injuries should be treated by these means in the forward area, and they should then be transported as soon as possible to a rear area where proper study and definitive care can be administered.

Resuscitation and Anesthesia

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IN THE SUCCESSFUL management of the wounded individual, the maintenance of adequate respiratory effort is of first importance. Not only should the efficiency of the mechanics of respiration be maintained but, in addition, preservation of a patent airway is absolutely essential for adequate ventilation.

Obstruction of the air passages in the unconscious patient may occur for a variety of reasons: (1) the dropping backward of the tongue into the hypopharynx; (2) collapse of the supporting soft tissues of the neck; (3) collection of blood or mucus in the pharynx or tracheobronchial tree; (4) the presence of foreign bodies at any level in the tracheobronchial tree.

These factors may result in inadequate amounts of air reaching the lungs despite the fact that the patient is making strong efforts to breathe.

Respiratory obstruction may be manifest in several ways. The individual may not be breathing at all and no movement of the chest detectable. Short, gasping types of respiration, often accompanied by a jerking movement of the head and neck, are frequently indicative of obstruction. Strenuous use of the accessory muscles of respiration, indicated by a short jerky type of breathing, uneven descent of the diaphragm and contraction of the muscles of the neck, may be seen.

Treatment of Respiratory Obstruction

Placing the subject in the prone position with his head turned to one side and resting on one arm will frequently alleviate the obstruction. This position will assist also in draining blood and mucus out of the subject's mouth and pharynx.

The tongue should be brought forward. This is easily accomplished by grasping the tongue with the thumb and forefinger and actually pulling it forward. Because the surface of the tongue is usually well lubricated, it helps to use a piece of gauze or cloth to prevent the tongue from slipping out of one's grasp.

If for any reason it is inadvisable to turn the patient in the prone position, the respiratory obstruction may often be relieved with the subject in the supine position by lifting the chin and extending the head. It may be necessary to lift the jaw forward by lifting at the angle of the jaw and tilting the subject's head backward and bringing the chin upward and forward. The tongue should be lifted forward out of the mouth as previously described.

The aspiration of blood or mucus from the mouth or pharynx may be accomplished with the use of an ordinary soft rubber ear syringe. Repeated aspiration may be necessary.

Foreign bodies, such as broken teeth, may be removed by opening the mouth and extracting the foreign body with the fingers. A small block of wood or a rolled gauze or cloth should be placed between the teeth far back in the patient's mouth to prevent closing of the jaws over the operator's fingers.

Artificial Respiration

After the patency of the airway has been established, if the subject is in need of artificial respiration, the *back pressure-arm lift method* should be used.

The subject is placed prone, elbows bent, arms overhead with one hand upon the other. The cheek is placed on the hand, the face turned slightly to one side. The operator kneels on one knee at the head of the subject and puts the foot of the opposite leg near the elbow. He places his hands on the subject's back, in such a way that the thumbs just touch, the heels of the hands being just below a line running between the armpits. He rocks slowly forward, elbows straight, until his arms are approximately vertical, exerting steady pressure upon the chest. Then he commences to rock backward slowly and slides his hands to the subject's arms just above the elbows. He raises the arms until resistance and tension are felt at the subject's shoulders. Then he drops the arms. This completes a full cycle. The cycles are repeated 12 times per minute, the expansion and compression phases being of equal length, the release periods being of minimum duration. A standard technique for administering the method is being prepared by a committee representing many organizations.

Alternate Methods

1. Hip lift-prone pressure method: The subject is placed in the prone position and the hips lifted and lowered. When the hips are lowered, pressure is exerted on the lower part of the thorax (at the

lower ribs) to aid in expulsion of air. Raising of the hips 3 to 4 inches causes active inspiration because of descent of the inert diaphragm and hyperextension of the spine. The hips are raised and lowered approximately fifteen times per minute. A piece of cloth, shirt, or belt may be passed beneath the hips to facilitate lifting.

2. The hip roll method may be used to reduce fatigue on the part of the operator. In this maneuver the subject is grasped at the distant hip and "rolled" onto the rescuer's knee. This also can be combined with the prone pressure method.

3. If the patient cannot be placed in the prone position, artificial respiration may be administered by grasping the arms at the elbows, extending them over the patient's head, then bringing the arms down over the chest and pressing them against the chest wall.

Specific Procedures

1. Conserve body heat of the wounded man who has been chilled, by the judicious use of blankets or other available covering. It is important that adequate blanketing be placed underneath, as well as above, the individual. Heat should not be added until blood transfusion is in actual progress.

2. Administration of fluid or any other material by mouth is to be avoided, at least until the final diagnosis and disposition are made.

3. Treat pain with morphine (1/6 grain or 10 mg.) if the pain is severe. Do not give morphine to patients with severe head wounds, who are not breathing, or whose respiration is shallow. Do *not* assume that all seriously wounded need morphine. The drug is best administered intravenously, given slowly and well diluted. When injection is impossible (no syringe), morphine gr. ¼ may be held under the tongue until it is dissolved. No patient should receive more than ¼ grain of morphine.

4. Plasma or a satisfactory plasma substitute should be administered if the blood pressure is at critically low levels, and pulse fast and weak. The plasma should be reserved for the critically injured patient. Plasma should be given only to the extent of maintaining the systolic blood pressure at a level of 85 mm. of mercury.

5. Extreme care should be observed in positioning the patient and in making him comfortable. Sudden shift in position may prove deleterious to the patient's circulation and respiration,

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Emergency Treatment of Genito-Urinary Tract Injury

By George E. Chittenden, M.D.

Detroit, Michigan

Blast

Compression—associated with other intra-abdominal or intrathoracic injuries.

I. Kidneys.
  1. Symptoms—related to associated injuries.
    (a) Anuria.
    (b) Oliguria.
    (c) Hemorrhage.
  2. Immediate Treatment:
    (a) Supportive.
    (b) Plasma—whole blood.
    (c) Antibiotics.

II. Bladder. Rupture of distended bladder.
  1. Symptoms.
    (a) Suprapubic pain and distension.
    (b) Abdominal rigidity.
    (c) Possible bloody urine.
    (d) Difficulty or inability to void.
  2. Associated injury—fracture of pelvis.
  3. Immediate Treatment:
    (a) Supportive.
    (b) Plasma—whole blood.
    (c) Antibiotics.
    (d) Indwelling catheter.
    (e) Trocar suprapubic if unable to catheterize.

Trauma

I. Kidney—(1) High velocity fragments (puncture). (2) Rupture.
  1. Symptoms.
    (a) Pain in flank and upper abdomen.
  2. Findings.
    (a) Shock.
    (b) Mass in flank and abdomen.
    (c) Muscle spasm and rigidity in flank and abdomen.
    (d) Hematuria.

  Findings may vary depending upon other visceral injuries.
  3. Immediate Treatment:
    (a) Supportive.
    (b) Plasma—whole blood.
    (c) Morphine.

II. Ureteral—Puncture or rupture from high velocity fragments.
  1. Diagnosis will probably not be made but should be suspected if puncture of abdomen takes place along course of ureter.
  2. Immediate Treatment:
    (a) Treatment of other visceral injuries are more important.

III. Bladder—(1) High velocity fragments (puncture). (2) Rupture.
1. Symptoms.
   (a) Pain in suprapubic region.
   (b) Evidence of skin wound if (1).
2. Findings.
   (a) Pain in suprapubic region and inguinal region.
   (b) Distension.
   (c) Lower abdominal muscle spasm or rigidity.
   (d) Hematuria.
3. Immediate Treatment:
   (a) Supportive.
   (b) Plasma—whole blood.
   (c) Morphine.
   (d) Antibiotics.
   (e) Indwelling catheter.

IV. Urethra—(1) High velocity fragments. (2) Rupture (partial or complete).

High velocity fragments may (a) puncture urethra and corpora cavernosum; (b) produce external trauma.
1. Symptoms.
   (a) Pain.
2. Findings.
   (a) Hemorrhage.
   (b) External wounds.
   (c) Shock.
3. Immediate Treatment:
   (a) Control of hemorrhage by pressure dressings.
   (b) Plasma—whole blood.
   (c) Antibiotics.
   (d) Morphine.

Rupture.

(Partial)
1. Symptoms.
   (a) Pain (urethra, perineum).
2. Findings.
   (a) Hematuria.
   (b) Subcutaneous hemorrhage.
3. Immediate Treatment:
   (a) Indwelling catheter.
   (b) Plasma—whole blood.
   (c) Antibiotics.
   (d) Morphine.

(Complete)
1. Symptoms.
   (a) Pain (urethra, perineum, supra-region).
   (b) Oozing of blood from penis.
   (c) Inability to void.
   (d) Shock.
2. Findings.
   (a) Subcutaneous hemorrhage, especially of the perineum, scrotum and inner surface of thighs.
   (b) Bladder distended.
   (c) Suprapubic pain.
   (d) Abdominal muscle spasm and rigidity.
3. Immediate Treatment:
   (a) Catheterization if possible. If not, suprapubic trocar or puncture with spinal needle under local anesthetic.
   (b) Plasma—whole blood.
   (c) Antibiotics.
   (d) Morphine.

V. External Genitalia (scrotum and contents)—All degrees of trauma: minor—major.
1. Symptoms.
   (a) Pain.
   (b) Hemorrhage.
   (c) Shock.
2. Findings.
   (a) According to severity of injury.
3. Immediate Treatment:
   (a) Control of hemorrhage.
   (b) Ligation of bleeding points.
   (c) Pressure dressings.
   (d) Plasma—whole blood.
   (e) Antibiotics.
   (f) Morphine.

VI. Spinal Injuries with Paralysis—Care of bladder important.
1. Symptoms.
   (a) Paralysis of lower extremities.
2. Findings.
   (a) Paralysis (according to spinal level).
   (b) Distended bladder.
3. Immediate Treatment:
   (a) Indwelling catheter.
   (b) Suprapubic trocar.
   (c) Plasma—whole blood.
   (d) Antibiotics.
   (e) Morphine.

Techniques of Immediate Treatment

I. Always record:
1. Name and address.
2. Date and time of injury.
3. Location of injury—extent of injury.
4. Treatment:
   (a) Amount of blood, plasma.
   (b) Antibiotics.
   (c) Morphine.

II. Priority of evacuation:
1. Immediate hospitalization.
   (a) Rupture or puncture of kidney.
   (b) Rupture or puncture of bladder.
   (c) Complete rupture of urethra.
   (d) Spinal injury.
2. Hospitalization as soon as possible.
   (a) Suspected rupture of viscus.
   (b) Blast injuries.
   (c) Partial rupture of urethra.
3. Hospitalization when convenient.
   (a) Injuries to genitalia.
4. Ambulatory.
   (a) Superficial injuries.

III. Cleansing of wounds.
1. Soap and water.
2. Sterile dressings.

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Emergency Care of Eye Injuries

By Windsor S. Davies, M.D.
Detroit, Michigan

Chemical Ocular Burns

THE IMMEDIATE first aid treatment of chemical ocular burns is of paramount importance. The most effective treatment is water, water and MORE WATER. This may be accomplished by placing the patient on his back and thoroughly irrigating his eyes with water, lifting the lids so that irrigation may reach as far thereunder as possible. Another method is to immerse the head far enough into a pail of water so that the eyes may be opened and closed under water and thus cleanse them of the irritant. One may also have the patient use the cup of the hands to flush water into the eye. The eyeball and conjunctival sac should then be carefully investigated, searching for chemical irritants which may be imbedded and which should be removed. Acid burns usually show an immediate and sharp demarcation as to their extent. Alkali burns, on the contrary, may cause continued destruction.

Neutralization of severe burns by the use of acids in the case of alkali burns and of alkalis in the case of acid burns has proven to be unwarranted and should not be considered in the treatment of chemical burns of the eyeball.

Following the emergency irrigation and inspection of the eye, the injured person should then be transported to a station where the eyeball can be anesthetized with 0.5 per cent pontocaine or similar ocular anesthesia, and then again be irrigated copiously with normal saline or water for five or ten minutes. At this time the eye should again be inspected for the presence of particles which may be retained from the chemical burn which may continue the irritation. The extent of the corneal burn may be determined by the installation of 2 per cent buffered fluorescein solution. The damage is then shown by the presence of a greenish stain of the corneal, scleral or/and conjunctival tissue.

The conjunctival sac may then be filled with ophthalmic hydrosulphasol, using an eye dropper and handling the eyeball very carefully. A pressure bandage is then lightly applied to both eyes, and the care of the burn should be continued under the direction of an ophthalmologist.

Arsenical burns such as may be caused by Lewisite can be decontaminated specifically by an installation of 5 per cent BAL "dimercaprol" which may be either in the form of an ointment or in an ethylene glycol solution.

Chemical burns of the eyelids should similarly be irrigated copiously with water or saline, flushing well to remove foreign material and particularly to remove particles of the offending material.

Foreign Bodies

Ocular foreign bodies may lie free on the surface of the eyeball, may be in the cul-de-sacs or may be imbedded in the cornea, sclera or conjunctiva.

Loose foreign bodies may oftentimes be removed by irrigation. If not, a cotton-tipped applicator moistened with sterile water or normal saline is useful in their removal. The foreign body is best located by having adequate illumination and by proper eversion of the eyelids when the search is made. Care must be taken in manipulating the eyelids and eyeball in search of such a foreign body to be sure the eyeball itself is not lacerated, because such manipulation may result in extrusion of the ocular contents by the pressure applied.

Imbedded corneal foreign bodies are best removed following the installation of 0.5 per cent pontocaine. These foreign bodies are oftentimes readily removed with the aid of a cotton-tipped applicator. If the foreign body is more deeply imbedded, this may necessitate the use of a foreign-body spud to carefully remove the particle. When the imbedded foreign body is located in the visual axis of the cornea, care must be exercised to avoid excessive trauma to the corneal tissue because of the subsequent scar tissue proliferation which may result in visual loss. Following the removal of a loose foreign body, no pad is required. When an imbedded corneal foreign body is removed, it is possibly better to apply a dressing to the eyeball to keep the lids closed until the corneal wound is healed. The use of local antibiotic ointments following the removal of the foreign body may be indicated.

Where there is difficulty in locating or removing a foreign body, whether loose or imbedded either due to lack of time, poor illumination, lack of instruments, et cetera, it is best to place a pad on the closed eyelids and permit the foreign body to be removed at a station where facilities are available for this purpose.

Lacerations

Lacerations of the eyelids should be washed with soap and water and debrided. Sterile dressings may then be applied with moderate pressure so that the patient may be transported to a location where closure of the lid lacerations may be done adequately. Proper closure of these lacerations is important, especially where the lid margin has been lacerated in order to avoid disfigurement and oftentimes subsequent reconstructive surgery.

Where the injury results in exposure of the cornea, it is most important to protect the cornea from drying by the copious application of a lubricant or a mild ophthalmic ointment. Protective dressings are not indicated in these cases due to the possibility of trauma to the cornea from the bandage that is applied. It is most important to keep the exposed cornea well lubricated until surgical repair of the lids may be made to protect the exposed eyeball. Where inspection reveals that the sclera or cornea has been lacerated, a sterile binocular dressing should be applied, no irrigation should be attempted and the patient transported by litter to the station or the hospital where facilities are available under experienced personnel to properly evaluate the severity of the wound and provide subsquent treatment. An important early treatment of penetrating ocular wounds is the administration of tetanus antitoxin.

A common ocular injury from flying debris is the presence of an intraocular foreign body. This possibility should always be suspected where eye trauma has occurred. Such patients should have both eyes bandaged and be transported to a station where facilities are available for further eye care.

Orbital Rim Fractures

In injuries about the head and face, especially where marked edema around the eye has occurred, one should keep in mind the possibility of facture of the orbital rim. Palpation about the orbital rim should be made early to ascertain, if possible, if there is displacement. If displacement is suspected, further studies by x-ray should be made early so that operative replacement may be accomplished. Many of these deformities are not discovered until all edema has subsided when reconstruction presents a much more difficult problem.

Atomic Explosions—Special Problems

The immediate damage to the eyes in atomic explosions is in great part the result of blast and concussion. Ocular burns are common. Temporary blindness may result. Temporary dazzling has been noted.

In actinic or flash conjunctivitis the symptoms of acute pain, photophobia, inflammation and swelling of the bulbar conjunctiva and lids and epiphora occur from four to twelve hours after exposure. The involvement is usually bilateral. The acute discomfort lasts usually for fifteen to twenty hours. Treatment for this is the installation in each eye of 0.5 pontocaine, not cocaine, several drops usually being required to give relief. This may be followed by a drop of 1:1000 adrenalin. Ice compresses give considerable relief from pain, and sedation may be prescribed.

Except in case of chemical burns where copious irrigation is of immediate necessity, and exposure of the cornea where constant lubrication is required to avoid drying, when in doubt about ocular injuries, bandage both eyes with a light pressure bandage and direct the patient to a station where care may be given by one experienced in the treatment of ocular injuries.

MSMS

SHOCK AND HEMORRHAGE

(Continued from Page 314)

Hemorrhage has already been discussed as a part of the shock picture, recognizing that though hemorrhagic shock and traumatic shock are not physiologically identical they are so closely related that for all practical purposes they may be considered together. The treatment of hemorrhagic shock is, first, control of hemorrhage, and second, the treatment of all shock as outlined above. Loss of blood demands blood replacement, and there is no substitute for blood. As a general rule, patients who have lost large amounts of blood can adequately handle large amounts of blood replacement. The danger of elevating the blood pressure and starting bleeding over again, which has been so much emphasized in some writings, is probably far less than the danger to the patient of continued acute anemia and the anoxia which is a part of that picture.

Ear, Nose and Throat Emergency Treatment

By James E. Croushore, M.D.

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Respiratory Obstruction

RESPIRATORY obstruction may result from injuries to the larynx and upper trachea and from maxillo-facial wounds. Injury may be crushing in the type of lacerations from flying objects. In maxillo-facial wounds the tongue may fall back into the pharynx and must be pulled forward. If patient is unconscious, a large safety pin can be fastened in tip of tongue affording an easy anchor to grasp. An anesthetists air-way may be useful.

Fractures of the larynx resulting in acute edema or hematoma may cause obstruction in a few moments. If intubation tube is not available, tracheotomy is indicated. If a tracheotomy tube is not available, a fairly firm rubber tube, about 2.5 inches long, may temporarily be sutured in the tracheotomy incision.

Acute laryngeal obstruction may result from inhalation of hot air. (Look for singeing of hair in the nasal vestibule.) Hoarseness in burns is of great importance in determination of need for constant observation with a possibility of tracheotomy in mind. Such patients are safer and more comfortable in a semi-recumbent position, not lying flat.

Symptoms Indicating Need of Tracheotomy.—Cyanosis, retraction of suprasternal and supraclavicular areas, retraction of intercostal spaces, hoarseness or aphonia, restlessness, anxiety and possibly "struggling for air." Pulse rapid, at first somewhat full, later becoming weak. Remove all foreign bodies in mouth: false teeth, chewing gum, food, vomitus, blood and any other debris found. If obstruction is not relieved by these measures, do a tracheotomy.

Avoid heavy sedation in respiratory obstruction.

Nose

Fractures of nose may cause severe nasal hemorrhage. Nasal packing is best emergency measure in reducing or stopping blood flow. Vaseline packs are superior to dry packs. Oxycel and other local coagulants may be used. Immediate reduction of nasal and facial fractures is not necessary in emergency situations.

Fracture through cribriform plate may cause cerebrospinal fluid to escape from the nose. Under these circumstances there is great danger of meningitis if nose is packed.

Ears

Fractures through base of skull involving the temporal bone may result in hemorrhage and flow of cerebrospinal fluid from external auditory canal. Do not irrigate or make any attempt to clean out the canal for at least three days.

Lacerations of auricle usually do not require emergency repair. When debridement is done, be conservative to avoid disfigurement. Approximate by suturing skin only; do not pass suture through cartilage.

RESUSCITATION AND ANESTHESIA

(Continued from Page 336)

as well as aggravate already existing injuries (see fractures and tourniquets).

Anesthesia

Patients requiring anesthesia and operation should be evacuated to the hospital promptly.

Small lacerations, debridements prior to dressing and evacuation may be done under local or infiltration anesthesia with 1 per cent procaine.

Blocks, such as brachial, et cetera, are extremely unsatisfactory in advance stations because of the time factor frequently involved in obtaining satisfactory anesthesia by these methods and because of the technical difficulties involved.

GENITO-URINARY TRACT INJURY

(Continued from Page 337)

IV. Indwelling catheters.
  1. Preferably Foley No. 14 or 16, 5 cc. bulb.

V. Suprapubic puncture.
  1. Shave area immediately above symphysis.
  2. Soap and water.
  3. Skin antiseptic.
  4. 3 to 5 cc. 2 per cent procaine ¾ to 1 inch above symphysis.
  5. Insert trocar or spinal puncture needle with point of needle directed slightly towards umbilicus.
  6. Aspirate with syringe (50 cc.).

VI. Antibiotic of choice.
  1. Penicillin S-R, 400,000 units.
  2. Streptomycin, 1.0 gm.

VII. Morphine, gr ¼, or Demerol, 100 mg.

Acute Radiation Injury

By Lawrence Berman, M.D., A. Hazen Price, M.D., and Louis D. Stern, M.D.

Detroit, Michigan

WHEN AN ATOMIC bomb explodes, injury to civilians results in three ways: (1) The *intensive blast* produces serious trauma, including concussion, bruises, and fractures either directly or by falling debris. (2) *Burns* result from the direct action of radiant energy (flash burns) or from burning clothing (flame burns). (3) *Acute radiation injury* results from the exposure of the whole or major portion of the body to the initial nuclear radiation of an atomic explosion. This consists of gamma rays and neutrons, 98 per cent of which are emitted during the first minute after the explosion. This type of radiation injury should be clearly distinguished from irradiation sickness, the symptom complex resulting from therapeutic irradiation in the treatment of disease. In this condition, the number of roentgen units is carefully controlled and the adjacent tissue amply protected.

From data collected following the Japanese bombing, as well as from observations made in subsequent explosions, it can be concluded that the syndrome of radiation injury may result from any sort of atomic explosion, e.g., either an air burst, surface burst, or underwater burst. Those persons who are in the open, unshielded by natural objects, will constitute the most exposed group. Those protected by natural objects or buildings of concrete, brick, or metal, will be less exposed, and those in tunnel caves or air raid shelters, the least affected. Those persons in close proximity to the blast will be killed immediately. Those a mile or so from the source of radiation will receive very little, if any, radiation effects. It should be noted that large numbers of those persons with radiation injury will also have burns of varying degree as well as blast injuries. This will of course make evaluation of subjective symptoms difficult.

The severity of the clinical picture of persons affected by radiation injury is mainly dependent therefore upon the distance they happened to be from the site of explosion and the type of intervening protection.

The one symptom which is believed to be the best presumptive evidence of radiation effect is vomiting. It occurs within two hours of exposure and is so constant in occurrence that it should be a valuable aid in screening those exposed and those unaffected. Many persons will vomit for psychologic reasons, but when a large amount of data was collected in Japan, the relationship of this symptom to real injury was indisputable. If it lasted only a few hours, it could be concluded the injury would prove to be very mild or at least moderate. If it lasted twenty-four to forty-eight hours, the cases were considered severe, and if it continued for several days, very severe and usually fatal injury had occurred. The clinical symptoms and findings are characterized mainly by hemorrhage, infection, anemia, and malnutrition.

TABLE I

Mild to Moderate Injury	*Severe Injury*	*Very Severe Injury*
100r-300r units	300r-400r units	600r or more units
Vomiting for *1-2 hrs.*	Vomiting for *1-2 days.*	Vomiting for *several days.*
Then, after *two to four weeks:*	Then, after *one to three weeks:*	Then, after *two to three days:*
possible epilation sore throat malaise diarrhea purpura	epilation malaise sore mouth and throat diarrhea and vomiting pallor-purpura bleeding emaciation	diarrhea sore mouth and throat fever—coma emaciation
100% *recovery* unless complicated by poor previous health or superimposed injury or infection.	Death in 50% cases from hemorrhage and sepsis.	Death in 100% cases within 14 days

Clinical Picture of Radiation Injury

The data to follow is that derived from an analysis of the report on the bombings in Japan, as well as from the experimental work done on animals having received a comparable dose of x-ray.

Causes of Pathological Findings.—The clinical manifestations are related to injury of various tissues concerned with the formation of blood cells and antibodies, and the maintenance of an intact vascular system. The order of radiosensitivity of the more common tissues is:

1. Lymphoid tissue and bone marrow.
2. Epithelial cells.
3. Endothelial cells of blood vessels.
4. Connective tissue cells.
5. Nerve cells.

Hematologic Manifestations.—The principal signs of irradiation damage to cells of blood-forming and blood-vascular tissues are:

1. Degenerative morphologic changes in lymphocytes (pyknosis, karyorrhexis, vacuolization) in tissues and blood.

2. Decrease of lymphocytes in blood.
3. Swelling and ulceration of lymphoid tissues, followed by atrophy.
4. Decrease of granulocytes in blood.
5. Decrease of platelets in blood.
6. Anemia.
7. Atrophy of bone marrow.
8. Prolonged coagulation time.

Disturbances in Hemostatic Mechanism.—The hemostatic mechanism is more complicated than can be explained on the basis of current knowledge, and the damages produced by total body x-irradiation are so far reaching that most, if not all, of the clotting mechanism may be directly or indirectly involved. In addition, there is evidence of widespread vascular damage about which little is known. Since the normal hemostatic mechanism is not well understood and the effects of x-irradiation are only partly known, rational and complete treatment of irradiation hemorrhage cannot yet be firmly established. However, certain factors in the pathogenesis of the syndrome are established and limited therapeutic aid is available.

Irradiation hemorrhage was said to be the most frequent cause of death in those who died from irradiation injury in Japan. As our information has been extended, there is cause to question the validity of this conclusion. In dogs subjected to total body x-irradiation in the lethal range, hemorrhage is generally the most obvious gross finding, but it is doubtful that it is often a primary cause of death. Nevertheless, hemorrhage is an important factor in the morbidity if not in the mortality of animals so exposed.

In dogs exposed to 450r total body x-ray, the extent to which irradiation hemorrhage develops may vary considerably. The organs most frequently demonstrating hemorrhage are organs of motion, the heart, lungs, and gastrointestinal tract. There is also hemorrhage in the lymph nodes, and bleeding about the teeth is also a frequent finding. The following changes in the hemostatic mechanism have been described for these animals: (1) thrombocytopenia, (2) an increased concentration of fibrinogen, (3) a prolongation of the whole blood clotting time, (4) the occasional demonstration of a circulating anticoagulant, and (5) petechial hemorrhages and ecchymoses. To summarize, it is beyond doubt that the evidence pointing to increased clotting time after irradiation is not attributable to chance alone.

Factors Affecting Prognosis.—The severity and speed of development of the various pathological phenomena and clinical manifestations depend on:

1. Dosage of ionizing radiation.
2. Individual susceptibility (including pre-existing disease of the hematopoietic tissues).

Scope of the Problem of Medical Management.—On the basis of the experience of the atomic explosions in Japan, it is estimated that about 15 to 20 per cent of the surviving casualties of an atomic bombing will suffer chiefly from radiation sickness. The majority of these do not require medical attention. However, attempts to estimate the number of casualties to be expected in the Detroit area must take into account the differences in the types of buildings, amount of protection offered by shielding, density of population peculiar to this area, and the facts that the Japanese populations received no prior warning and were subjected to the activity of bombs which are already obsolete.

Diagnosis.—Very characteristic changes take place in the peripheral blood, as listed previously. It is to be expected that in the event of an atomic bomb attack, there will develop a severe acute shortage of technical personnel for making blood counts and associated studies. Therefore, the recognition of radiation injury would perforce be based, to a great extent, on the clinical findings, and probable dosage of ionizing radiation, estimated, in part, on an approximate knowledge of the distances of victims from the center of the explosion.

Where technical facilities are available, blood studies should be as complete as possible, both for determining prognosis, which is of importance in selection of therapeutic measures, and for the purpose of gathering valuable information which would lead to improvement in medical management. Greatest emphasis should be placed on leukocyte and platelet counts because changes in these elements most accurately reflect the severity of exposure; but since leukocyte counts are more directly and conveniently determined than is the case for platelet counts, they should receive the highest priority. The relatively long life span of erythrocytes eliminates red cell counts as reliable early indications of radiation sickness. Because of individual variations of leukocyte levels, complicating sub-clinical infections, inaccuracies inherent to the counting method, especially under emergency con-

ditions, only large variations in leukocyte counts can be regarded as significant (suggested significant levels: less than 1,000 white blood cells per cu. mm.; 1,000 to 5,000 white cells per cu. mm.; over 5,000 white cells per cu. mm.).

Treatment

Present information indicates that when dosages exceed 600 roentgens, there is no specific effective treatment. With dosages of 400 roentgens or less, treatment offers the possibility of saving many lives. The principles of treatment include:

1. Immediate hospitalization to insure complete rest.
2. Wholeblood transfusions, as required.
3. Adequate nourishment, including intravenous feeding when necessary (sugars, proteins, vitamins).
4. Measures to control infection (antibiotics, antitoxins, immune sera, prompt treatment of local infection).
5. Measures to combat the coagulation defect (toluidine blue) (?).
6. Measures to control capillary bleeding (?).

Special Feature of the Medical Problems.—Present knowledge of the effects of specific treatment of the hematopoietic tissue lesions is meager. The following observations on the effectiveness of specific measures for the control of the hematologic aspects of postirradiation sickness are based mainly on experimental evidence.

Factors Related to Hemorrhage:

1. Thrombocytopenia: No substitute for platelets is available. The deficiency cannot be corrected with transfusions.
2. Prothrombin: Not significantly altered after irradiation.
3. Circulating anticoagulants: In some experimental animals, anticoagulants of a heparinoid nature are present. These animals respond partially or completely to administration of toluidine blue intravenously.
4. Capillary hemorrhage: Whole blood transfusions have not been shown to be effective. In some experimental animals, both hemorrhage and clotting time were increased immediately after transfusions. Rutin and vitamin C have a theoretical application, although evidence is lacking as to their effectiveness.

Factors Related to Infection:

1. Leukopenia: No therapeutic agent is at present available for preventing or treating leukopenia.
2. Antibodies: Passive transfer of certain antibodies has not been effective in dogs, although the evidence is conflicting and incomplete at present.
3. Antibiotics: Antibiotics represent the main line of defense against infections secondary to the reduced resistance of the irradiated individual. In dogs, the combination of whole blood and aureomycin is more effective than aureomycin alone.

Factors Related to Anemia:

1. Whole blood: Transfusions of whole blood or red cell suspensions constitute the only effective treatment in patients with anemia secondary to damage of the bone marrow.
2. Hematinics: Supplemental iron, Vitamin B_{12}, and folic acid may be useful in patients without severe atrophy of bone marrow.
3. Oxygen: Oxygen therapy may be useful in some cases.

Recommendations

1. Dissemination of information: The widest possible distribution among the medical profession of information regarding the clinical signs of postirradiation sickness is advisable.

2. Segregation of casualties by means of estimated dosages of ionising radiation: Arrangements for personnel and equipment for segregating casualties on the basis of probable degrees of exposure, determined by distance of victims from the center of explosions, should be planned.

3. Diagnostic laboratory procedures: Efforts should be directed toward the development of minimal standardized laboratory procedures requiring the least equipment and personnel.

4. Stockpiling of strategic materials. The stockpile should include:

   (1) Whole blood or red cell suspensions, or facilities for their rapid procurement; 1,000 cc. per day, per patient, for three to four weeks.
   (2) Glass tubes for clot retraction.
   (3) Antibiotics.
   (4) Antitoxins, antisera.

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Blood Clotting Mechanisms and Acute Radiation Injuries

By Walter H. Seegers, Ph.D.

Detroit, Michigan

FROM THE observations of irradiation injuries in Japan, it was believed that hemorrhage was one of the most frequent causes of death. This prompted extensive investigations about the nature of the hemorrhagic disorder. Some of these investigations were on biological materials exposed to atomic radiation itself but, for the most part, it was necessary to resort to the use of x-rays to produce the injury.

The chief investigators of this problem have been J. Garrott Allen of the University of Chicago and Eugene P. Cronkite, Naval Medical Research Institute. Recently, Kenneth M. Brinkhous of the University of North Carolina, Leandro Tocantins of the Jefferson Medical College, Philadelphia, and the associates of C. H. Best of the Department of Physiology, University of Toronto, have reported an experimental work concerned with radiation injury. These investigators recently reviewed part of their work at the Josiah Macy, Jr., Conference on Blood Coagulation and Allied Problems, New York City, January 21 and 22, 1952. My interpretation of their views is given below.

During one period of the investigation, it was found that heparin or a heparin-like substance appears in the plasma in abnormally high concentration. It was possible to give the animal toluidine blue, which combines directly with heparin to neutralize its action, and improve the clotting potential of the blood sample. This seemed to suggest that the radiation causes the release of heparin, presumably from the mast cells located in the walls of the blood vessels themselves. But, heparin may also be released as the result of other stimuli, as, for instance, in shock caused by the experimental injection of peptone or anaphylactic shock. It was recalled that the radiated animals were given blood transfusions to keep them alive. This leaves the possible interpretation that incompatible blood caused shock reactions and the release of heparin. So, it may be that heparin or heparin-like substances found in the blood of irradiated animals were there as the result of the blood transfusions involving incompatible blood and not as the result of the ionizing radiation. Doctor Best's associates at the University of Toronto have irradiated animals and caused the release of heparin by anaphylactic shock after the radiation injury. The experiment thus shows that radiation leaves the animal in a condition which will still permit the release of heparin. This was an important point to have covered because it might have been found that heparin could not be released by challenging with shock-producing materials after radiation injuries.

The work of Tocantins indicates that the inhibitor found in the blood of irradiated animals is antithromboplastin. This anticoagulant was discovered by him a number of years ago and is a lipid found not only in plasma but also in other biological materials. To test for the presence of this inhibitor, blood is drawn by silicone technique so that it is not mixed with tissue thromboplastin and the platelets do not come in contact with rough or wettable surfaces. Such blood clots very slowly, but if it is diluted with saline, the clotting times are reduced. With the blood from irradiated dogs, dilution with saline must be carried much farther than with the control blood samples. The interpretation is that the lipid inhibitor is present in higher concentration after irradiation.

Doctor Cronkite placed emphasis on the importance of platelets in the hemorrhagic manifestations. He believes they are of major importance. Attempts to transfuse platelets have been made with some success. The technical difficulties encountered, however, make that approach to the problem laborious and time consuming. Measurements of the prothrombin utilization showed that the conversion of prothrombin to thrombin becomes progressively slower as the platelet count diminishes after radiation injuries. In the animals that survive, the prothrombin utilization returns to normal far in advance of the return of the platelet count to normal. It seemed as if only a few platelets were required for restoring the normal activation rate of the prothrombin. The experiments on that point were not extensive, and the interpretation may be that the large young platelet is not exactly the same with respect to clotting factors as the average normal platelet population. The work of this investigator leads him to the view that fresh whole blood should be of great value after atomic radiation injuries.

From the Department of Physiology and Pharmacology, Wayne University College of Medicine.

The comments made herein are based on the interpretation of the views expressed by the investigators cited.

Industrial Medical Services and Civil Defense

By A. F. Lecklider, M.D.
Detroit, Michigan

THE MEDICAL SERVICES of industry constitute an important part of Civil Defense in a city like Detroit, where a large number of industries maintain such services. Doctors associated with industry in Detroit early recognized the fact that the medical services of industry could and should play an important part in the care of the injured among the general population resulting from an atomic bomb attack. Initial steps to formulate a plan of co-operation between industrial medicine and the Civil Defense Plan were taken by a group of doctors in industry in February, 1951. Plans were developed in co-operation with the Wayne County Medical Society, and eventually industrial medical services were integrated into the Medical Care Branch of Civil Defense as the Industrial Medical Aid Section. Medical personnel of the industrial services are given Civil Defense assignments.

In the event of an atomic bombing every available medical facility in the area would be required for the care of the thousands of injured. Existing hospitals may be destroyed. In any case, they would be swamped in a few minutes by the influx of wounded. Emergency organizations, to replace destroyed hospitals and supplement surviving ones, require time for organization, for the assembly of personnel and supplies, and for the preparation of quarters. Any medical facility already in existence becomes, therefore, of inestimable value in the earlier hours of the emergency.

Industry, in the Detroit area particularly, has much to offer. Over 200 industries maintain medical services, many quite large, well staffed and equipped. These facilities are scattered throughout the city, so that some of them would likely survive unless the city were entirely destroyed. Scores of doctors and hundreds of nurses are allied with the industry of the area. The personnel of these medical services is accustomed to the emergency treatment of injured people.

Industry has available auxiliary forces which will be helpful to the operation of emergency medical installations of the size required by such an emergency. Plant protection forces, trained supervision, and numbers of war veterans experienced in the medical branch of the armed services can be assembled at a moment's notice to take part in the handling of large groups of injured people, in the preparation of suitable areas for their care, and even to assist in dressing wounds. These industrial medical services and their staffs serve as the experienced nuclei around which the larger organizations required by the atomic bomb can be gathered.

Each medical service, of course, maintains a stock of supplies. Under the Detroit plan industrial medical services carry a reserve of basic supplies equal to three months' normal usage.

Because they are always staffed, many of them day and night, industrial medical services will be the first medical units, aside from surviving general hospitals, which will be available to care for the injured immediately following an attack. They will instantly swing into action, bringing out reserve supplies and occupying adjacent plant areas such as cafeterias, auditoriums, et cetera, which are immediately cleared for the purpose. Adequate entrances will be set up and preparations made to handle wounded in large numbers. Regular and auxiliary personnel will report to previously assigned posts. Plant rescue teams, already organized among those with first aid training, will assemble.

When the plant itself is not involved in the catastrophe, its medical personnel, supplies, and rescue teams will be made available, wherever needed, through the channels of the zone leader and Medical Care Branch of Civil Defense.

In order to integrate the industrial medical services of Detroit and vicinity into the over-all defense plan, a survey was made of all industry in the Detroit area. Its objective was to determine the size, location, accessibility and personnel of each facility. As a result of this survey, forty-five of the larger services were designated as Casualty Care Stations. About 150 have been designated as first aid posts. Under the medical care plan, a Casualty Care Station receives seriously injured cases brought in by ambulance and rescue teams on litters and extends definitive treatment for shock, hemorrhage and burns. It does emergency surgery on cases requiring immediate intervention to save life. Its patients are eventually evacuated to emer-

Dr. Lecklider is Chief, Industrial Medical Section.

gency hospitals, or to hospitals outside the Detroit area. Medical services were designated as Casualty Care Stations when their facilities were large enough to care for a considerable number of accident cases simultaneously, and when they were staffed by physicians and a number of trained personnel. It is necessary that such facilities have easy access from the street and, also, that they be readily expansible to large size by taking over adjacent areas of the plant. An industrial first aid post cares for ambulatory cases only, and after emergency treatment directs its patients to the rear for further care. First aid posts will fly a Red Cross flag to designate their location.

Under the conditions prevailing after a bombing attack, with thousands of wounded flooding every medical facility, it is certain that additional help of medical personnel and supplies will be required by the industrial facilities after a short period. Under the Detroit medical care plan, such help will be forthcoming through the operations of the zone leaders in control of the emergency medical facilities of the ten zones into which the city has been divided. The zone commander will dispatch necessary personnel from emergency hospitals and Casualty Care Stations assembling in school or other buildings of his zone.

Industrial medicine in Detroit is awake to the problem of medical care after atomic bombing. It has supplied necessary information as to personnel, facilities and supplies. It has accepted assignments. It is stockpiling some basic supplies. Its medical personnel is studying the latest methods in the care of injuries and burns peculiar to atomic bombs. In varying degree, industry has in effect programs for giving first aid training to certain groups of employes; key personnel have been advised of plans for expansion of medical departments and their duties established; plans for quick conversion of vehicles to ambulances have been prepared; some plants have arranged for typing the blood of employes. Its efficiency and final contribution will be measured in large part, however, by the amount of help it receives from management in organizing for sudden expansion, and in having available the services of auxiliary plant personnel, properly informed and instructed in their assignments, when the day comes.

To summarize the contribution which industrial medicine can make to civil defense:

Industrial medicine is already there, on the job;

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Public Health in Civil Defense

By Paul T. Salchow, M.D.
Detroit, Michigan

THE FUNCTIONS of this section are:

1. To organize and maintain adequate defenses against biological warfare or sabotage.
2. To protect the health of the community against communicable diseases in the event of a large-scale disaster.
3. To receive and protect vital records during disaster periods.
4. To plan for the care of pregnant women and newborn infants during a large-scale disaster.

General Principles

The health of a community following an atomic bombing or other major disaster will, to a great extent, depend upon its health before the bombing occurs. It follows then that the well-known proved protective methods of communicable disease control should be intensified in the time available before a disaster occurs.

The serious public health problems will arise several weeks after a bombing. This means that most of the field personnel of the Public Health Branch may be released for casualty care during the period immediately following the bomb drop. It also allows time for the procurement of biologicals, whose stockpiling is not practical, from more distant points.

Section on Biological Defense.—This is an entirely new field in civil defense and can only be done adequately on a national basis. The Detroit area is fortunate in having readily available a large number of highly trained bacteriologists, together with three universities and several biological supply houses. The local branch of the Society of American Bacteriologists has co-operated in organizing this section into thirteen teams, one of whose tasks is to standardize diagnostic tests and adapt them for emergency use. Other special studies will be conducted which will not be published.

Industrial Hygiene Section.—In this area, a number of plants produce or use products which are potentially dangerous. Such plants have been

Dr. Salchow is assistant director, Public Health Branch.

spot-mapped, and field workers will be sent to the area after the incident to evaluate the hazard and recommend measures for the protection of the community.

Communicable Disease Section.—The advisability of immunizing the entire population against certain of the communicable diseases has been carefully considered. However, such a plan is not practical until and unless backed by state or federal authorities, since these agencies will have to arrange for the distribution of antigenic agents. In the meantime, normal immunization programs should be intensified as a civil defense measure. This section also will receive reports of unusual incidence of disease from physicians, industry and others, and conduct epidemiological investigations to determine the possibility of sabotage. After a bombing, diagnostic teams will be assigned to making inspections of people in shelters. Herman Kiefer Hospital or, as an alternate, Maybury Sanatorium facilities will be used for isolation and hospitalization when needed.

Maternal and Child Health Section.—Experience indicates that a large number of pregnant women will go into premature labor following an atomic bombing. It is expected that most of these will be treated as casualties in emergency hospitals, or delivered at shelters or in homes outside the affected area. After the acute phase of a bombing, evacuation of remaining pregnant women should be considered. All living babies will be kept with their mothers insofar as possible.

Laboratory Section.—The immediate need for the personnel of this section will be in blood typing and cross-matching. Intensive training is under way to provide as many persons as possible who are able to do this work accurately. An additional problem, later on, will be the huge number of laboratory and bacteriological examinations for contaminants in food and water, and for communicable disease in patients. Space is planned in the Herman Kiefer Hospital laboratory with several large private laboratories as alternates or additions.

Environmental Sanitation.—This section will be responsible for procuring pure water, safe food, proper waste and sewage disposal, and insect and rodent control. Such a task will require the combined specialized personnel of the city health department, the county health department, and also from the state. Local teams, which will form the nucleus, have been designated according to function. Possible sources for emergency supplies of water and milk have been surveyed, in great detail, with names and addresses of owners and operators of milk and food processing plants in the area. There will be close co-operation with the Welfare Department in inspection of food and sanitation of shelters after the bombing. Not the least important function of this section will be the dissemination of information through the proper channels to the public regarding safety of food and water supplies, and measures to be taken by individuals for their own safety. This should help to minimize mass hysteria.

ACUTE RADIATION INJURY

(Continued from Page 343)

(5) Toluidine blue.

(6) Rutin, vitamin C, vitamin B_{12}, folic acid, iron salts.

(7) Sugars, proteins for intravenous feeding; 2,000 cc. per day, per patient, for three to four weeks.

(8) Equipment for intravenous infusions.

(9) Hematological laboratory equipment (microscopes, slides, hematological pipettes, Wright's stain, counting chambers, et cetera).

Bibliography

1. Allen, J. G.; Moulder, P. V., and Enerson, D. M.: Pathogenesis and treatment of the postirradiation syndrome. J.A.M.A., 145:704-711, 1950.
2. Dunham, C. L.; Cronkett, E. P.; LeRoy, George V., and Shields, Warren: Atomic bomb injury: radiation. J.A.M.A., 147:1 (Sept. 7) 1951.
3. U. S. Department of Defense and U. S. Atomic Energy Commission: The Effects of Atomic Weapons. September, 1950.

INDUSTRIAL MEDICAL SERVICES

(Continued from Page 346)

it is staffed and functioning in 200 locations; it is a going concern. It is widely distributed. It is manned by staffs accustomed to emergencies. It has supplies and facilities. Finally, it is a part of thoroughly organized, closely knit industrial organizations, having the ability and personnel to cope with situations. It is this association with the manufacturing organization of industry which give industrial medicine its greatest potential in atomic disaster.

The Formula Works

By Joseph R. Hainline
Detroit, Michigan

IN THE HEADLINES this morning is a single topic, which already is the subject of discussion among realistic citizens throughout the State of Michigan. It is the Formula for Freedom—the title of an educational effort on the part of the Michigan State Medical Society. And it means just what it says. The medical men, alarmed at the threat of the loss of freedom in their own profession and confronted with the accomplished loss of freedom in others, have dedicated their efforts to a wider dissemination of the meaning of freedom. In their scientific language, they call it a "formula." But for the layman, it's simply a plan or a program which embraces three vital categories.

The first of these is "know yourself.". . . Before any man can hope to fit himself into his community and his government, he must know where he stands, where his ambition may take him logically, and he must be aware of his own limitations. The Formula for Freedom seeks to reduce that self-evaluation down to a mass science through which the average man can get better to "know himself."

The second category is "know how to live." Psychiatry is, perhaps the most inexact science outside meteorology. But it is making great strides toward one goal—teaching people how to live together—how to adjust themselves to our complicated society.

The medical profession in its Formula for Freedom seeks to aid the individual in this adjustment problem.

The third and last category in the formula is "know your government." And for practical purposes, at least, a knowledge of the processes of government, the pressures at work and how to counteract those pressures by the use of counter-influence, is the most important single function of the Formula for Freedom. That subject I will take up at greater length later. But first we must dwell briefly for purposes of explanation on the two steps which by necessity must precede "knowledge of government."

Read at the Annual County Society Public Relations Conference, Detroit, January 27, 1952.

To begin with, the Michigan State Medical Society has appointed a joint committee with the Michigan Health Council. This group is charged with the preparation of a standard chart which will be called the Periodic Health Appraisal. The chart will be one of four in a series dealing with religious, economic and legal appraisals . . . the other three to be prepared and distributed by the representative professional organizations involved. The four pages will constitute a check-list for the individual to complete. Upon completion it should give the individual a reasonably accurate accounting of himself in those four basic fields of living. It is planned that the four-page leaflet will be made available to the public on as wide a scale as possible. The appraisal is to be kept by the individual and referred to periodically as the need arises, in order that he may better "know himself."

This is just the beginning. Man does not live in his personal thermos bottle. He lives in a big jug with a lot of other people. All those people are—like himself—struggling to climb up the slippery sides of the jug to the top where the air is cleaner and the view is better. In this struggle, some people get hurt. The degree of injury is in direct ratio to the man's overestimation of his own prowess. The injury can be lessened, the struggle made more equitable, if each man can learn to "know himself." Only then can he know where his rightful place in the jug is. That's the second point in the medical society's Formula for Freedom. If a man knows himself, he stands a better chance of knowing how to live with others. The medical society's program in this respect can be especially valuable. Because in America, we've never learned to live with one-another. The incredibly high crime rate is one proof of that fact. We have not learned how to live with each other because until recently it wasn't necessary. The vast expanses of land, which were free for the taking, provided a safety valve for the men who needed elbow room. For instance, even to this day it's not clear whether Daniel Boone regarded himself as an advance agent for civilization or a refugee from it. In any event, his aim was to get away from the people who bothered him. And that was all right in Daniel Boone's day. But it's no longer possible to get away. We've got no place to go. We've reached the point where the British were 500 years ago and where the Japanese were 2,000 years ago. They had no place to go. And over the years, they built-up a code of behavior

which enables them to live with each other in harmony, greater than any place else in the world. The Japanese social code is particularly noteworthy as a long-evolved procedure, through which neighbors, although they may be bitter personal enemies, may live in harmony side by side. The crowded conditions on the island made the development of such a social code absolutely necessary.

Western man—that is, the western hemisphere man—is only now reaching that point of necessity. The medical society has recognized the need for a moral code of restraint which is certainly preferable to a legal code of restraint. The Formula for Freedom is that code, which if pushed to its logical conclusion can head off the trend toward the coward's refuge in government-planned security through coersion.

The Very Reverend William T. Reeves of St. Marks Cathedral in Grand Rapids has paid a high clerical tribute to the medical profession. Said he: The doctor's influence is tremendous. I beg that you use it and not abuse it, because using it depends a great deal on whether or not we shall keep our freedom.

The point which is not being brought home to the average citizen is that when he gains a measure of security, he loses a measure of freedom. The formula is as absolute as the law of supply and demand. Men who are thinkers and not doers have tampered with the law of supply and demand in this country with disastrous results. They are seeking now to tamper with basic freedoms. One of these freedoms is the right to choose or reject the man who will be responsible for an individual's health. These planners make wide use of the phrase "welfare of the common man." I submit that there is no such creature as the "common man." Historically, Americans have refused to admit that, as individuals, they are the same as the fellow next door or the man working the next lathe.

Those of us who value freedom now are engaged in a running battle with those who would destroy it. Historically, this is the second time the battle has been joined. In labor circles the socialist movement reached its peak in 1903. That was when Samuel Gompers stamped it out in the American Federation of Labor. Nationwide, socialism reached its peak in 1920, when Eugene Debs polled nearly a million votes for President from the Atlanta penitentiary. But the movement failed then—as it must fail now—because the workingman refuses to admit that he's a proletarian for life. He reserves for himself the freedom to progress within the bounds of his native talents.

Although Americans need guidance in the art of living together, they are past masters at the art of self-government. And that comes from a deep heritage of necessity. Fredrika Bremer, a German visitor, noted that characteristic of our culture back in 1835. Said she: These people associate as easily as they breathe. The smallest common problem has always produced a spontaneous committee. The west bound wagon trains gathering at Independence automatically organized their own schedules and elected their own leaders. Even before the day of the labor union, mechanics' societies had their own job information service. The "club law" of the squatters was self-enforced against formal law.

So now, in spite of the vastly expanded activities of government, spontaneous associations of citizens still keep alive the self-government habit in all parts of American life. Every year, ten million Americans travel to one or more of some 17,000 national or state conventions. And practically all Americans belong to one or more of the country's 200,000 clubs, societies and organizations. Such activities are the guts of American self-government.

Through these regional clubs, fraternities and societies, Americans learn to "know their government." By and large, Americans know and believe what they are told by responsible leaders. Although the individual may—and often does—reserve for himself the right to accept or reject a statement of fact, he is nevertheless swayed in his judgment by what he hears. And the mental impression he gets about his government *from* his government may be vastly different from what his neighbor or doctor or lawyer believes to be the truth.

In recent years, those of us who are engaged in the reporting of news have discovered a strange and alien philosophy creeping into the federal government. It's a bureaucratic philosophy that they, in their intellectual ignorance, know what's best for the people and intend to see that their own desires are carried out. To accomplish their purposes, they have accumulated in the past fifteen or twenty years, a corps of 45,000 public relations experts. These public relations people spent $74,800,000 of the taxpayers' money last year, according to a report by the Hoover Commission. On

the record, these public relations people are charged with keeping the people, through the press and radio, informed of the activities in their separate agencies. And if that were true, the expenditure of $74,000,000 of the taxpayers' money might be justified. Because it's the right of every citizen to "know his government."

However, in many instances, these hired publicity people must devote themselves to covering-up for their departments or pleading the special cause of their bosses.

For example, on January 14, 1951, the Veterans Administration issued a handout on the appointment of Vice Admiral Joel T. Boone as the administration's chief medical director. A single paragraph far-down in the six-page handout said that Boone succeeded Dr. Paul B. Magnuson, whose resignation previously presented had been accepted.

One enterprising news service dug behind the handout and found out that the well-liked Dr. Magnuson had been fired in a political hassel with Veterans Administrator Carl Gray. Boone, a retired navy doctor, got the job.

It was later revealed that the entire Veterans Administration was under investigation. And a Senate committee vindicated Dr. Magnuson. But the public wouldn't have known that if it depended on government press agents to present the facts.

Back in 1948, a House committee was investigating the administrative branches of the government for evidence of propagandizing. And Chairman Forrest Harness of that committee said on the House floor: "The sole legal and ethical function of a federal information service is to issue factual, objective and studiously unbiased information." He quoted the federal statute to support his statement.

"But," he continued, "the law has been and is being violated repeatedly by numerous administrative agencies. In hundreds of ways, some devious, some blatantly open, federal agencies, officials and employes are ignoring or flaunting this legal safeguard, often for the deliberate purpose of fostering sentiments or support for administrative policy or viewpoint." And Representative Harness continued: "We need only to remember, that if the power of federal propaganda is applied for good and wise purposes on one occasion, it can be applied to another purpose, mischievous and dangerous." And he concluded: "Whether the immediate purpose of government propaganda is good or bad, the fact remains that individual liberty and free institutions cannot long survive when the vast powers of the government can be marshaled against the people to perpetuate a given policy or a particular group of office holders."

And if anyone doubts that some elements of our government are above such practices, let me cite a couple of examples—one of them probably painfully well known to this group. For ten years, six federal agencies have been carrying on an unlawful campaign in behalf of the so-called national health insurance plan, which many choose to call socialized medicine. These agencies are led by the Social Security Administration. Also in on the act are the U. S. Public Health Service, the Children's Bureau, the U. S. Office of Education and the Department of Agriculture. Over the years, these six agencies have released hundreds of pamphlets, booklets and press handouts, all favorable to the program of socialized medicine. Not one pamphlet was issued pointing up the weaknesses of state medicine as practiced by such countries as Russia and Great Britain.

One pamphlet issued by the Public Health Service went so far as to advise the public: "You can write a letter to the readers' column of your local newspaper and tell your editor why the readers of the paper should back the national health insurance bill." That statement and thousands like it on the same subject are, in my opinion, clear violations of Section 201, Title 18, of the United States Code. But nobody protested, and so far as I know, that propaganda continues today.

Another example of government propagandizing involves the ill-starred Brennan Farm Plan. It was a hodge-podge of political hackery, rejected first by Congress and later by such authoritative farm organizations as the National Farm Bureau and the National Grange. But Agriculture Secretary Brennan, whose job it is to carry out the orders of Congress, stumped the country for months trying to take the issue to the people over the heads of their elected lawmakers. He was hooted down wherever he went, but he never admitted defeat, and the Brennan farm subsidy plan at this moment is resting quietly on a shelf from where it will no doubt be brought out again sometime.

And so, it is not enough to know your govern-

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Detroit Physiological Society

Meeting of January 17, 1952

Analysis of Central Nervous System Depression Induced by Hypnotic Drugs

GRAHAM CHEN,
Parke, Davis and Company, Detroit

The central nervous system depression of certain hypnotic drugs has been investigated by their antagonistic action toward a central nervous system stimulant (a convulsant). By plotting the CD_{50}s of Metrazol against the corresponding doses of the depressant, three straight lines are obtained for sedation, hypnosis and general anesthesia. The slopes and the intersects of the lines represent the sedative, hypnotic and anesthetic potencies of a hypnotic agent and its minimal hypnotic and anesthetic doses respectively. The depth of the three stages of depression is indicated by its anticonvulsant effect.

A comparison of the sedative, hypnotic and anesthetic effects was made of the following compounds: pentobarbital-sodium, phenobarbital-sodium, barbital-sodium, carbromal, and ethyl alcohol. While the barbiturates are potent hypnotic and anesthetic agents, they are less effective than carbromal in sedation. Ethyl alcohol is a very poor sedative and hypnotic agent.

The joint effect of pentobarbital and phenobarbital and that of pentobarbital and carbromal were also determined. An additive and a synergistic effect were obtained respectively with the former and the latter combinations.

Goiter Prophylaxis with Iodized Salt

BROCK E. BRUSH,
Henry Ford Hospital, Detroit

In 1923 a survey of the school children in four Michigan counties was made by the State Health Department and the State Medical Society. It revealed a 38.6 per cent incidence of goiter in 65,537 students. A close and constant relationship was noted in each instance in that in each county the incidence of goiter was in inverse proportion to the available iodine. In the mining county of Houghton there was no iodine in many areas and the incidence of goiter was 64.4 per cent, while in Midland, an agricultural county, the iodine present was 7.3 parts per billion and the goiter incidence 32.7 per cent.

Following this, iodized salt was advertised extensively. This salt was placed on the market in 1924 through the co-operation of the Michigan Salt Producers Association. Subsequent surveys showed a remarkable decrease in goiter incidence. In 1928 the overall incidence was 9.9 per cent, and in 1951 only a 1.4 per cent incidence. Records indicated that there was a marked decrease in goiter where iodized salt had been used regularly.

The importance of iodine as a food essential must be kept continually in the minds of the people and the medical profession of a goiter area. The minute quantity of iodine has been proven not to cause any deleterious effect and is not detectable when the salt is used for cooking and canning foods.

Projection of Afferent Fibers To the Cerebral Cortex

ERNEST GARDNER and BENJAMIN HADDAD,
Wayne University, Detroit

Experiments have been carried out on cats under barbiturate anesthesia. This type of anesthetic suppresses spontaneous cortical activity to such an extent that impulses entering the cerebral cortex can be detected as surface positive potential changes. This type of change, following stimulation of various peripheral nerves, has been used as an index of impulses reaching the cortex. Nerves from muscles, joints and skin were stimulated electrically and cerebral cortex explored with recording electrodes. Various incisions were made in the spinal cord in attempts to abolish the evoked activity. The results indicate that for all the nerves studied, there are bilateral pathways in the spinal cord other than the classical route, the dorsal funiculi. Furthermore, it is quite doubtful whether any impulses from muscle afferents ascend in dorsal funiculi. The results are in accord with the work of other investigators on the monkey.

Wayne University College of Medicine

Postgraduate Continuation Courses

March 10-June 7, 1952

These courses are open to all qualified persons. Veterans receiving benefits under the GI Bill should contact Dr. Arthur Johnson, Veterans Administrator at Wayne University, 5524 Cass Avenue.

Registration for these courses should be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine.

ANATOMY

Surgical Anatomy (Last half)	College of Medicine	Tuesday 3-5	$35.00
Selected Readings in Physical Anthropology	College of Medicine	Hour to be arranged	$15.00
Regional Anatomy a. Head & Neck	College of Medicine	Friday 1-5	$50.00
b. Thorax, Abdomen and Pelvis	College of Medicine	Thursday 1-5	$50.00
c. Back and Extremities	College of Medicine	Wednesday 1-5	$50.00

(Regional Anatomy open also to graduates of Dentistry)

MICROBIOLOGY

Parasitology and Medical Entomology	College of Medicine (Minimum of 4)	Friday and hours to be arranged	$50.00
Virology	College of Medicine (Minimum of 4)	M. W. F 1-5	$50.00
Bacterial Physiology	College of Medicine (Minimum of 4)	Tu. & Thur. 1-5	$50.00

PHYSIOLOGICAL CHEMISTRY

Nutrition	College of Medicine	M. W. F. 11-12	$35.00
P. Chemistry Seminar	College of Medicine	Weds. 3:30-4:30	$15.00
Physical Biochemistry	College of Medicine	M. W. F. 1-3	$45.00

PATHOLOGY

Neuropathology	College of Medicine	Friday 1-5	$50.00

DERMATOLOGY

Seminar in Dermatology	Receiving Hospital	Weds. 10-11:30	$15.00
Dermopathology Seminar	College of Medicine	Weds. 12-1	$15.00
Conference on V. D.	Social Hygiene Clinic	Thurs. 12:30-2	$15.00

Wayne University Postgraduate Continuation Courses (Continued)

INTERNAL MEDICINE

Medical Conference	Receiving Hospital	Thurs. 11-12	$15.00
Gastroenterology	Receiving Hospital	Sat. 8-9 a.m.	$15.00
Medical X-Ray Conference	Receiving Hospital	Tuesday 11-12	$15.00
Allergy Clinic & Conf.	Receiving Hospital (Minimum of 4)	Tues. 8-11 a.m.	$25.00
Hematology Clinic	Receiving Hospital	Thurs. 2-3	$15.00

SURGERY

Surgery Seminar	College of Medicine	Monday 4-5	$15.00

COMPREHENSIVE UNIT COURSES

Obstetrics	Herman Kiefer Hospital Pavilion 5 (Limit 10)	Weds. 2:30-5	$50.00

OPHTHALMOLOGY

Basic Ophthalmology	College of Medicine (Limit 10)	Full Time (9 months)	$900.00

This class in Ophthalmology will begin in September, 1952. Applications must be in immediately. Applications can be secured from the Postgraduate Department at the College of Medicine, 1512 St. Antoine, Detroit 26, Michigan.

NORTHERN TRI-STATE POSTGRADUATE MEDICAL ASSOCIATION

April 15, 1952

Amphitheater of Engineering Building

University of Notre Dame

South Bend, Indiana

Registration—8:00 A.M.

Morning Session—8:45 A.M.

Greeting—L. G. ERICKSON, M.D., President of the Saint Joseph County Medical Society. Introduction by James E. McNeel, M.D., President of the Northern Tri-State Medical Association.

Welcome to Notre Dame—REVEREND J. J. CAVANAUGH, C.S.C., President of the University of Notre Dame.

"Treatment and Management of Burns"—W. H. STEFFENSEN, M.D., Grand Rapids, Michigan.

"The Management of the Arteriosclerotic"—WM. A. THOMAS, M.D., Chicago, Illinois.

"Your Feet and Mine"—GORDON W. BATMAN, M.D., Indianapolis, Indiana.

"Pathological Conference"—Associates of the South Bend Medical Laboratory, South Bend, Indiana.

Luncheon in Faculty Dining Hall—12:15 P.M.

Speaker—DOCTOR CLARENCE MANION, Dean of the School of Law, Notre Dame University—"The Key to Peace."

Afternoon Session—2:00 P.M.

"Angiography." Motion Picture prepared by the Searle Company.

"Mechanism of Loss of Consciousness and its Management." (Head Injuries)—EDGAR A. KAHAN, M.D., Ann Arbor, Michigan.

"Proctology"—LOUIS J. HIRSCHMAN, M.D., Detroit, Michigan

Business Meeting

Tour—4:15 P.M.

Tour of The Lobund Institute for Research in the Life Sciences under the direction of James A. Reyniers, Director of Lobund at Notre Dame University.

For hotel reservations, contact Joseph J. Lang, M.D., 730 J.M.S. Building, South Bend, Indiana.

Editorial

IT IS LATER THAN YOU THINK

EVERY SENSIBLE American hopes, and most of them pray, that all Civil Defense activities will prove to be a waste of time and energy. *Let not the wish be father to the thought!* For should this bright expectancy be fallacious—should the horrors of the Atom-bomb become a stark reality in this nation, in this state—then these preparations of an alert citizenry will be found to have averted needless deaths, disabilities, and tragedies. Perhaps the Kremlin can foretell which side of the coin will face up.

This issue of THE JOURNAL contains articles dealing with certain medical problems that appertain to Civil Defense. It is about these, the life-saving aspects, that we as doctors of medicine are basically affected, as it is here that we can make our best contribution to society in the event, that awful event, of disaster.

In an adequate Civil Defense program, there is a place for every man, woman, and child to perform some service or make some contribution. Informed authorities agree that every doctor of medicine will be called upon for tremendous, hazardous, and difficult assignments. The duration of this emergency may extend over a considerable interval of time. All elective medical and surgical procedures will be postponed; our hospitals, our services, our supplies will be taxed to the breaking point. The A-bomb does not permit any semblance of "business as usual," especially for physicians and surgeons.

Thus, every doctor of medicine can hardly avoid the responsibility of being, and keeping, informed about all that can be learned so as to equip him to do his best job. Most of the people of the State of Michigan have been conditioned to expect not just good but the best of medical care. Your participation in some form of organization as a medical team or unit in the Civil Defense program will be solicited. Let none be complacent to that degree as to sink his ostrich-like head into the sands of "Unlikely Occurrence."

RALPH A. JOHNSON, M.D.

COMMUNITY ACTIVITIES

IN THE PAST we have invited the attention of our members to the need for physicians to take an active part in community and civic activities. This is especially urgent for several reasons. First and foremost is the fact that physicians are among the best educated and best trained people, and for that reason owe their neighbors the benefit of their counsel and services. Their pre-medical and medical studies have been directed to make them better able to survey and analyze a situation and make proper deductions from the facts found.

In this rapidly changing world, there is no outlined route of procedure or established objectives. The world is getting more social and more socialized every day, and it is the duty of those citizens having the capacity and the knowledge to direct and lead the way. In almost every public gathering, there is some planning for the future or some consideration of what we as a community are trying to accomplish. Helpful suggestions and guidance are always in order, and are likely to be followed.

Many large groups of men and women are active in social thinking. We need only mention a few: the American Legion, the Veterans of Foreign Wars, the Michigan Health Council, the various Women's Clubs, Parent-Teachers Associations and the many business and service clubs. Every one of these has a place for our membership, with our special knowledge and skills, and if we take no part in guiding their thinking we have no right to complain if they come up with the wrong answers. This might happen when matters of especial interest to the medical profession are considered—as they often are.

The American Medical Association *PR Bulletin,* in urging physicians to take their rightful place in the community, pleads with them to exercise leadership in solving local health problems, to work with local health councils, and to help improve existing health facilities. According to a New York physician, a man who serves his community faithfully not only as a doctor but as a citizen will "inevitably convince a thinking populace that physicians are vitally concerned with the public good . . . and that their thoughts on controversial subjects are of distinct import to all."

THE SIXTY-FIVE YEAR PROBLEM

FIFTEEN years ago, when social security legislation first was placed on the books, the country was in the midst of a great depression, such as we had never seen, an effort was made to assure jobs for the young and healthy, as well as to provide security in the old age of the people who were still holding jobs which the younger people wanted. During the growing years of our republic our people worked for their security, scorned a handout, and searched for jobs to support their families. They attempted to provide for the future by saving when and if they could, and a goodly proportion did provide for their declining years, either by savings, investments, insurance, or establishing a business which would carry them through their years of lessened earnings.

During the years of depression, all such earnings and savings were wiped out. People had to cash their resources to supply their maintenance needs. There were no jobs, no industry to speak of, and the largess of the government set a support rate of needed earnings at sixteen dollars a week. If a person could not make that much, he was given a job raking leaves there and back again. Ambitious men wanted better conditions and agitated until the Federal Government adopted social security, providing for retirement at sixty-five, and giving younger people a chance at their jobs.

The allowances of this plan were absolutely inadequate, as everyone found out when a sufficient number of our people were in that retirement bracket. Two objectives were primary in this social legislation: (1) to care for the old retired person, and (2) actually the most activating reason, to create more jobs by putting the aging person out of work. Two things must happen. The allowances must be raised to a semblance of a living, and secondly the "old" person must not spend his life in idleness.

During the first third of this century, when the foundations were being made for our outstandingly marvelous economy, 68 per cent of people over sixty-five were gainfully employed; at the present time that number is only 43 per cent and the percentage of persons over sixty-five is constantly increasing.

Now comes the interest of the medical profession, other than economic. We must prescribe for the aged. Activity of mind and body are essential, if they are to be healthy or happy. Continued inactivity with loss of interest and ambition can only lead to deterioration of mind and body. We recognize that productive work of some amount will maintain alertness and a better prospect of good health. It is probably up to the medical profession to lead a resurgence of providing or promoting suitable work for those who are not wanted in industry.

This is a challenge worthy of our best thought.

OUR SOCIAL SECURITY

INCREASING MILLIONS of our population are coming under the social security laws. Other millions are now beginning to draw benefits, especially because of the amendments made by the last Congress. Outside of the industrial and other employes who are covered, about four and a half million self-employed are eligible. Not included are farm owners, doctors of medicine and other healers in private practice, lawyers, clergymen, dentists, architects, funeral directors, and professional engineers.

Workers who will have been covered for six quarters after January 1, 1951, and who have earned an average of $300.00 per month, will be eligible if sixty-five or over to retire and draw $80.00 per month for the rest of their lives, and the wife if over sixty-five will draw $40.00 per month. The self-employed, if he was wise and enrolled himself, will profit likewise. The worker will have paid into the Social Security "kitty" a total of $81.00 if he became enrolled and eligible during this last eighteen months which began January 1, 1951. Those who have been covered by the plan for years will have paid more. There is, however, a possibility for this extreme case, and there are many such cases—those who were not included until the last amendment, who are now eligible and whose inclusion is mandatory.

In setting up the plan, the Congress proceeded to make sure the beneficiary would leave the work for others, and provided that if he earns as much as fifty dollars a month at an employment covered, he will not be allowed to draw his rightful monies. However, he may earn as much as he likes or can and at any calling if he is past seventy-five. Why was the age set at seventy-five? And why any restrictions at all? If a man is willing to work and help produce to keep up the national economy, he should be allowed to do so without penalty.

The only justification to compel retirement at

sixty-five must have been the inability of such people to do acceptable work. If they can so do, they should be so allowed. We advocate the repeal of this one feature of the law. We know the whole law is vastly socialistic, and we believe very un-American. But we contend there should be permission for these workers to work after sixty-five, if they so desire and still can.

CEREBRAL PALSY

WE HAVE RECEIVED a mass of material from the chairman of the Cerebral Palsy Division of the Crippled Children's Hospital of Waco, Texas, calling attention to the increased interest in cerebral palsy and reporting work done in that hospital. There are an estimated 350,000 cases in the United States. Most of these are hopelessly handicapped. There is no known and recognized treatment. Formerly, these patients were mostly considered as total idiots. Many could not even hold up their heads, and never did more than mumble. Dr. Herbert H. Hipps, of Waco, has been working for ten years teaching these children to accomplish one thing at a time. The ordinary child acquires new powers one at a time—to hold up the head, to sit, to use the hands, to stand, later to walk. He also learns to talk. That is, he does these things if he can, and after long, devoted effort.

It is now known that some palsy children are capable of being taught many things. Talking is often very difficult and acquired with utmost effort, Dr. Hipps does not yet carry these children very far, for he has been working on these cases only six years. However, he is willing to correspond with anyone who wishes his advice.

In the few cases we have known, the problem of domiciliary care has been great. We can testify, however, that with determination and persistent care some of these cases will well repay the effort. We know a boy who learned his few possible activities gradually, finally began to walk at about five, went to the special local schools, was sent with another boy as attendent to private school where he finished the grades, the high school, then went to college and was graduated. He was able to use a typewriter with one finger, and could talk with difficulty. He next studied law, with another year for his Master's degree. When he came to take the bar examination in Michigan, he had special permission to take a typewriter and a stenographer. He passed the first attempt, and is now practicing law.

If any of our members come in contact, as advisors, with one of these apparently hopeless cases, do not give up. The possibilities are amazing.

ON THE RUN . . .

Mongolism rarely appears more than once in a single family.

. . .

Cold moist hands are noted in individuals who are anxious to undertake some kind of activity.

. . .

Female hemophilia is an established entity and may appear when the father is hemophiliac and the mother is a carrier.

. . .

Mitral stenosis, by itself, rarely causes angina.

. . .

Low back pain may occur because of a wish to carry out some action involving the whole body, such as running away.

—Selected by W. S. REVENO

MISCONCEPTIONS ABOUT UTERINE CANCER

(Continued from Page 294)

able to kill such cells that have spread to the surrounding tissues are dangerous to normal tissue; therefore, surgery might stimulate and spread the otherwise "sick" malignant cells. In treatment of cancer of the endometrium, experience shows that surgical treatment alone has resulted in a 50 to 55 per cent five-year salvage. By adding preoperative x-ray and/or intrauterine radium therapy this percentage has been increased to 67 to 90 per cent. Such improved results effectively support the employment of preoperative irradiation.

This worth-while paper of Doctors Scott and Reagan adds emphasis to the efforts of the Cancer Control Committee, MSMS, to secure more careful and complete examinations for cancer, especially cancer of the cervix. The slogan: "Rule out cancer in every diagnosis," is increasingly applicable to the physical examination practices of the present-day physician.

The public is becoming more critical of the physician who does not make the examinations they have been taught to expect. The physician who omits the female pelvis from his physical examination subjects such patients to a needless and dangerous risk and his diagnostic ability to merited criticism.

Annual Session of The Council

January 25-26, 1952, Detroit

HIGHLIGHTS OF THE COUNCIL

- The auditors' report for 1951, and the budgets for 1952 were approved. See pages 366-370.
- Annual Reports of Secretary, Treasurer, Editor and of three Standing Committees of The Council accepted.
- Secretary L. Fernald Foster, M.D., and Editor Wilfrid Haughey, M.D., re-elected. Treasurer A. S. Brunk, M.D., re-elected (deceased February 3, 1952).
- Progress report on Michigan Medical Service presented by R. L. Novy, M.D., Detroit, President.
- Progress report on Michigan Hospital Service presented by Wm. S. McNary, Detroit, Executive Vice President.
- Official report of MSMS Delegates to American Medical Association on Los Angeles Clinical Session (December, 1951) accepted.
- Committee reports presented by: (a) Hospital Relations Committee; (b) Advisory Committee to Michigan Social Welfare Commission; (c) Committee on Improvement of Nursing Services; (d) Legislative Committee; (e) Study Committee on "Little Hoover Commission" Report No. 8 (including statement of positive principles approved by MSMS; (f) Emergency Medical Service Committee; (g) Committee on Uniform Fee Schedule for Governmental Agencies; (h) Mental Hygiene Committee; (i) Periodic Health Appraisal Committee; (j) Preventive Medicine Committee; and (k) Rheumatic Fever Control Committee.
- Monthly reports of President Otto O. Beck, M.D., Birmingham; President-Elect R. J. Hubbell, M.D., Kalamazoo; Secretary L. Fernald Foster, M.D., Bay City; Rheumatic Fever Co-ordinator Leon De Vel, M.D., Grand Rapids; Legal Counsel J. Joseph Herbert, Manistique; and Public Relations Counsel H. W. Brenneman, Lansing, were accepted.
- Annual reports of individual Councilors on condition of profession in their Districts were presented.
- Mutual problems were discussed with Michigan Health Commissioner A. E. Heustis, M.D.
- Problem of over-utilization of hospital services for non-emergency cases, especially patients having Blue Cross-Blue Shield contracts, was presented by M.H.S. Executive Vice President Wm. S. McNary.
- Appeal from a county medical society decision in a matter of ethics was referred to the MSMS Ethics Committee for immediate action.
- Resolution re guest editorials in Bulletin of American Academy of General Practice of Wayne County was adopted.
- Appointments: E. W. Merritt, M.D., of Port Huron to Mediation Committee; R. C. Kingswood, M.D., Detroit, E. C. Long, M.D., Detroit, and R. A. Frary, M.D., Monroe, to the Committee on Television; John M. Wellman, M.D., Lansing, to Liaison Committee with Michigan Medical Service; E. F. Lutz, M.D., Detroit, H. M. Pollard, M.D., Ann Arbor, and O. T. Mallory, Jr., M.D., Ann Ar-

bor, to the Committee on Periodic Health Appraisal; Dean A. C. Furstenberg, M.D., Ann Arbor, and Dean G. H. Scott, Ph.D., Detroit, to the Emergency Medical Service Committee; G. B. Saltonstall, M.D., Charlevoix, as MSMS representative to the American Medical Education Foundation meeting in Chicago, February 17.

- A scroll of commendation to the Hillsdale County Medical Society on the development of its unique and successful cancer detection program was authorized.
- Progress report on Beaumont Memorial Restoration was presented by President Otto O. Beck, M.D., Birmingham; he stated that all MSMS members soon will receive a brochure and a letter from the President urging contributions to this worthy project sponsored by the Michigan medical profession.
- An invitation to the American Medical Association to hold the National Rural Health Conference in Michigan in 1954 was authorized.
- Invitation from Michigan Department of Corrections to make a re-survey of health and hospital facilities in Michigan prisons, as a follow-up to the MSMS-Michigan Hospital Association survey of a decade ago, was presented and approved.
- MSMS representatives to the Conference on Housing and Living Arrangements for Older People, to be held in Ann Arbor, July 24-25-26, 1952, were appointed.
- Otto O. Beck, M.D., Birmingham, R. L. Novy, M.D., Detroit, and H. B. Zemmer, M.D., Lapeer, were nominated for the Board of Trustees of Michigan Hospital Service.
- All county societies were urged to approve the Adult Education Program and to actively participate in it.
- The study of lung cancer, as developed by the American Cancer Society, was approved.
- Artificial insemination. The Council adopted the following motion: "The therapy idea of artificial insemination is an accepted medical procedure. It is up to the individual doctor of medicine or hospital staff as to when and where and if they wish to carry out such a procedure."
- The Council noted, with high commendation to the MSMS membership, that 96 per cent of Michigan's doctors of medicine paid AMA dues during 1951.

SECRETARY'S ANNUAL REPORT—1951

To The Council of the MSMS:

I herewith submit the report of the Secretary for the year 1951.

Membership

The Michigan State Medical Society membership for 1951 showed a total of 5,214 members, including 273 Emeritus and Life members, 39 Retired members and 196 Associate members. The total paid membership was 4,815 with net dues of $94,965.00. The 1951 membership was at the highest peak in the history of the society. The number of members with unpaid dues for 1951 was 84.

Deaths During 1951

Allegan County—J. Howard Van Ness, M.D., Allegan.

Bay, Arenac, Iosco County—Vanny H. Dumond, M.D., Bay City; Nina M. Ely, M.D., Bay City; Virgil L. Tupper, M.D., Bay City.

Berrien County—John C. Strayer, M.D., Buchanan; H. B. Anderson, M.D., Watervliet.

Calhoun County—Carlon R. Hills, M.D., Battle Creek; Bertha Moshier, M.D., Battle Creek.

Delta-Schoolcraft County—Gustavus W. Moll, M.D., Escanaba; George A. Shaw, M.D., Manistique.

Eaton County—George C. Stucky, M.D., Charlotte.

Genesee County—A. C. Edgerton, M.D., Clio; R. Bruce MacDuff, M.D., Flint; Vern N. Richeson, M.D., Flint.

Huron County—Charles B. Morden, M.D., Bad Axe.

Houghton-Baraga-Keweenaw County—A. D. Aldrich, M.D., Houghton.

Ingham County—F. C. Dunn, M.D., Lansing; Kenneth P. Hodges, M.D., Lansing; Fred M. Huntley, M.D., Lansing.

Ionia-Montcalm County—T. Jefferson Cox, M.D., Ionia.

Jackson County—R. H. Alter, M.D., Jackson; F. G. Ransom, M.D., Jackson.

Kalamazoo County—Glenn C. Andersen, M.D., Kalamazoo; Charles C. Bilodeau, M.D., Kalamazoo.

MEMBERSHIP RECORD—1951

County Medical Society	PAID		SPECIAL MEMBERS				DEATHS		NET MEMBERSHIP		1951		UNPAID	
	1950	1951	Emer.	Life	Ret'd	Assoc. Mil	1950	1951	1950	1951	Gain	Loss	1950	1951
Allegan	21	20	—	2	—	1	—	1	24	22	—	2	2	—
Alpena, Alcona, Presque Isle	23	22	—	2	—	1	1	—	24	25	1	—	—	—
Barry	12	12	—	3	—	—	—	—	15	15	—	—	—	—
Bay, Arenac, Iosco	70	70	3	4	2	2	2	3	78	78	—	—	—	—
Berrien	76	71	1	1	1	1	6	2	74	73	—	1	6	6
Branch	22	21	—	2	—	—	—	—	23	23	—	—	—	—
Calhoun	97	94	—	11	—	25	2	2	114	128	14	—	—	1
Cass	10	8	—	1	—	—	—	—	10	9	—	1	1	2
Chippewa-Mackinac	25	21	2	1	1	—	1	—	26	25	—	1	—	—
Clinton	15	15	1	—	1	—	1	—	15	17	2	—	—	—
Delta-Schoolcraft	25	26	1	1	—	—	1	2	26	26	—	—	—	—
Dickinson-Iron	20	20	—	—	—	1	—	—	21	21	—	—	—	2
Eaton	19	19	—	—	—	—	1	1	18	18	—	—	—	—
Genesee	187	189	2	20	2	3	5	3	204	213	9	—	1	3
Gogebic	20	21	—	—	—	—	—	—	20	21	1	—	2	—
Gd. Traverse, Leelanau, Benzie	42	37	—	1	3	—	4	—	38	41	3	—	1	—
Gratiot, Isabella, Clare	37	37	1	1	—	—	1	—	38	39	1	—	—	3
Hillsdale	17	16	—	3	—	—	1	—	19	19	—	—	—	—
Houghton, Baraga, Keweenaw	28	20	5	3	1	2	2	1	32	30	—	2	—	3
Huron	13	14	—	1	—	—	—	1	14	14	—	—	—	1
Ingham	162	174	1	4	6	1	3	3	172	183	11	—	—	2
Ionia-Montcalm	35	33	—	3	—	—	—	1	38	35	—	3	—	1
Jackson	101	100	5	6	—	3	—	2	113	112	—	1	—	—
Kalamazoo	139	135	5	3	3	2	4	2	145	146	1	—	1	1
Kent	274	287	7	17	2	6	5	5	296	314	18	—	9	2
Lapeer	13	13	3	—	—	—	—	—	16	16	—	—	—	—
Lenawee	40	38	3	—	—	2	1	1	42	42	—	—	2	—
Livingston	18	18	—	—	—	1	1	—	17	19	2	—	3	—
Luce	5	5	2	—	—	—	—	1	7	6	—	1	—	2
Macomb	51	54	—	2	—	—	—	1	52	55	3	—	1	—
Manistee	11	10	1	—	1	—	—	1	13	11	—	2	—	—
Marquette-Alger	39	38	1	3	—	—	1	1	40	41	1	—	1	—
Mason	13	11	—	—	—	—	2	—	11	11	—	—	1	1
Mecosta, Osceola, Lake	14	14	1	1	—	—	—	—	16	16	—	—	—	—
Menominee	15	17	1	—	—	—	—	1	16	17	1	—	—	—
Midland	23	23	—	—	1	—	—	—	23	24	1	—	—	1
Monroe	36	36	2	—	—	—	1	1	37	37	—	—	2	—
Muskegon	83	83	1	3	1	4	4	1	87	91	4	—	—	—
Newaygo	10	9	—	—	—	—	—	—	10	9	—	1	—	—
North Central Counties	23	19	—	—	1	1	1	—	23	21	—	2	1	—
Northern Michigan	35	31	1	—	—	—	2	—	33	32	—	1	1	1
Oakland	211	194	1	8	—	1	—	2	216	202	—	14	1	15
Oceana	7	6	2	—	—	1	—	—	10	9	—	1	—	1
Ontonagon	4	4	—	—	—	—	—	—	4	4	—	—	—	—
Ottawa	38	38	1	1	—	1	1	—	40	41	1	—	—	—
Saginaw	114	121	3	7	3	4	1	2	125	136	11	—	1	1
St. Clair	53	53	1	1	2	1	1	1	56	57	1	—	—	2
St. Joseph	24	25	1	—	—	—	—	—	25	26	1	—	2	—
Sanilac	12	13	—	—	—	—	—	—	12	13	1	—	—	1
Shiawassee	23	21	2	—	—	—	1	—	24	23	—	1	1	—
Tuscola	21	19	1	2	—	—	1	1	24	21	—	3	—	—
Van Buren	18	22	3	—	1	—	—	2	23	24	1	—	—	—
Washtenaw	183	176	3	6	2	90	1	1	279	276	—	3	1	5
Wayne	2,165	2,176	25	55	5	42	19	30	2,219	2,273	54	—	25	27
Wexford-Missaukee	17	14	—	1	—	—	—	1	17	14	—	3	2	—
TOTALS	4,809	4,783	93	180	39	196	78	77	5,114	5,214	143	43	68	84

Kent County—Paul W. Bloxsom, M.D., Grand Rapids; M. E. Cuncannan, M.D., Grand Rapids; James M. DeKraker, M.D., Grand Rapids; Henry J. Pyle, M.D., Grand Rapids; Leon E. Sevey, M.D., Grand Rapids.

Lenawee County—Periam B. Hardy, M.D., Tecumseh.

Luce County—Archie Jones, M.D., Newberry.

Macomb County—W. D. Lane, M.D., Romeo.

Manistee County—Ward H. Norconk, M.D., Bear Lake.

Marquette-Alger County—Richard A. Burke, M.D., Negaunee.

Menominee County—Thomas R. Whitmarsh, M.D., Stephenson.

Muskegon County—Clarence J. Durham, M.D., Muskegon.

Monroe County—William F. Acker, M.D., Monroe.

Oakland County—A. L. Brooks, M.D., Pontiac; John B. Schoenfeld, M.D., Birmingham.

Saginaw County—Joshua A. McLandress, M.D., Saginaw; Edward A. Pillsbury, M.D., Frankenmuth.

St. Clair County—William G. Wight, M.D., Yale.

Tuscola County—Robert L. Dixon, M.D., Caro.

Van Buren County—John Charles Maxwell, M.D., Paw Paw; N. D. Murphy, M.D., Bangor.

Washtenaw County—John Sundwall, M.D., Ann Arbor.

Wexford County—Sair C. Moore, M.D., Cadillac.

Wayne County—Charles D. Aaron, M.D., Detroit; James B. Blashill, M.D., Grosse Pointe; Canute G. Constable, M.D., Detroit; Langdon T. Crane, M.D., Detroit; James H. Dempster, M.D., Detroit; David H. Fauman, M.D., Detroit; B. F. Freeman, M.D., Detroit; Joseph D. Hayes, M.D., Detroit; Thomas N. Horan, M.D., Detroit; Reginald G. Huff, M.D., Wayne; Herbert S. Karr, M.D., Detroit; Joseph B. Kass, M.D., Detroit; Alex W. Lescohier, M.D., Detroit; Nelson MacArthur, M.D., Detroit; Edward G. Martin, M.D., Detroit; Robert M. Martin, M.D., Detroit; Roy D. McClure, M.D., Detroit; W. V. McIntosh, M.D., Detroit; W. Bede Mitchell, M.D., Detroit; Willard Monfort, M.D., Highland Park; Arthur K. Northrop, M.D., Detroit; Samuel H. C. Owen, M.D., Detroit; Morris Rand, M.D., Detroit; Alexander Thomson, M.D., Detroit; Harry Van Heldorf, M.D., Detroit; George F. Ward, M.D., Detroit; A. B. Wickham, M.D., Detroit; Josephus N. Wills, M.D., Detroit; Lennart W. Wiren, Jr., M.D., Eloise; Louis Zlatkin, M.D., Detroit.

The Journal

The following financial information relative to THE JOURNAL is found in the annual audit of MaDan and Bailey:

Income was $57,749.69 which is $2,349.69 over the tentative budget for 1951.

Expenses were $58,535.59 which is $3,135.59 over the tentative budget.

These figures indicate a net loss for the year 1951 of $785.90. This is accounted for by the fact that for the last three months of the year THE JOURNAL was operated under increased printing costs which were not anticipated in the original budget.

THE JOURNAL during 1951 continued the policy of special distinctive covers to emphasize some of the major activities of the Society; e.g., Cancer, Heart Disease, Michigan Medical Service, et cetera.

The Publication Committee and Editor have continued the practice of bringing to the members of the MSMS matters of special interest, both scientific and economic.

Finances

An audit of the books of the Society was completed by MaDan and Bailey as of December 24, 1951. This has been submitted to the Finance Committee for study and is available to any member of the society for perusal at the Executive offices, 606 Townsend Street, Lansing, Michigan.

A brief summary of the audit produces the following information:

Assets:	
Cash	$ 74,640.50
Accounts Receivable	11,286.15
Investments	66,164.12
Property	44,100.00
Prepaid Expenses	879.72
Other Assets	415.00
Total	$197,485.49
Liabilities:	
Accounts Payable	$ 6,491.31
Unearned Income	10,674.52
Reserved for Special Purposes	109,396.01
Unallocated equity	58,268.41
Net Income for the Period	12,655.24
Total	$197,485.49

From the income and expense statement we find that the total income was $100,345.27 with total expenses of $87,690.03, indicating a net income of $12,655.24.

The Income and Expense Summary sheets indicate that of the following items—

Equity—General Fund, Annual Session, Postgraduate Institute, THE JOURNAL, Contingent Fund, Building Fund, Beaumont Memorial, Lecture Grant, Public Education Program, Public Education Reserve, Rheumatic Fever Program—all show a gain except THE JOURNAL, which was mentioned before, and the Lecture Grant, which is not replenished.

Of the 1951 income, $30,000.00 was earmarked by action of The Council for the Public Education Reserve Fund. This amount is in addition to the $30,000.00 in bonds held for the Public Education program.

1951 Annual Session

The 1951 Annual Session held in Grand Rapids in September showed a total registration of 2,901, which was a record for an outstate meeting.

The General Assembly type of program with daily discussion conferences was continued as in recent years and brought to Michigan thirty essayists.

The exhibit during this Annual Session was comprised of 109 Technical Exhibitors in 125 spaces, which established another exhibit record. There were also eighteen Scientific Exhibits.

The policy of bringing to the Scientific Assembly out-of-state essayists of national and international reputation was continued and no expense was spared in making the meetings as interesting and instructive as possible. In spite of the rapidly rising costs of operation a modest gross profit, before proration of salaries, accrued to the society from the Annual Session.

To the 109 Technical exhibitors, the registrants showed their usual appreciation and gave them very generous attention.

1951 House of Delegates

The House of Delegates transacted the legislative business of the society with as much dispatch as possible consistent with thoughtful deliberation. Some of the highlights of the transactions of the House of Delegates were:

1. Adopted with commendation the Annual Reports of The Council, including recommendations re yearly visit to Washington, D. C., on the occasion of Michigan Day; that continued active tangible co-operation with the American Medical Association be maintained by every MSMS member, especially through contributions to the American Medical Education Foundation; that a Liaison Committee with Michigan Medical Service be created. The House of Delegates complimented the Council on its administration of the Society's finances; on the continued high quality level of THE JOURNAL; for its support of the Medical Examiner system; and for The Council's continued support of the Woman's Auxiliary. The House paid tribute to The Council for the progressive program of public relations it sponsored during the past year. Finally, the House expressed gratitude for the successful effort of The Council in providing a "home" in Lansing for the Michigan State Medical Society.

2. Adopted Resolutions concerning:
   (a) Past Speaker H. J. Pyle, M.D., Deceased.
   (b) L. G. Christian, M.D., Lansing, for service as AMA Delegate.
   (c) Matters for Mediation Committee (as amended).
   (d) Contributions to American Medical Education Foundation which may be earmarked for Michigan's two medical schools (Two resolutions presented; substitute resolutions adopted).
   (e) Objecting to "Little Hoover Commission's" recommendations re health (substitute resolution).
   (f) Comprehensive Physical Examination.
   (g) Fluoridation of water.
   (h) Congratulations to Trustees of Grand View Hospital, Ironwood.
   (i) Dues Collection Expense (1 per cent on both AMA and MSMS dues).
   (j) Teaching Civil Defense in Medical Schools.
   (k) Teaching Ethics in Medical Schools (substitute resolution).
   (l) Beaumont Memorial Restoration.
   (m) Alternate Delegates to attend AMA Sessions.

3. Disapproved three Resolutions:
   (a) Concerning Act 59 of P.A. 1937.
   (b) Favoring "Little Hoover Commission" recommendations re health.
   (c) Moral Degeneration in Government.

4. Discussed two matters in Executive Session (Resolution re Act 59 of P.A. 1937; and Annual Report of Committee to Study Medical Practice Act).

5. Adopted four amendments to the MSMS By-Laws as follows:
   (a) Chapter 8, Section 1, re composition of House of Delegates (excluding associate members in delegate count).
   (b) Chapter 5, Section 5, re qualification of Emeritus Members.

(c) Chapter 8, Section 10-d, re election of Alternate Delegates.
(d) Chapter 9, Section 12, re change in Councilor Districts.

6. Disapproved proposed amendment to MSMS By-Laws:
Chapter 8, Section 1 re composition of House of Delegates (including associate members in delegate count).

7. Two proposed Amendments to MSMS Constitution were referred to 1952 House of Delegates:
(a) Article X, Section 2, re Treasurer being a member of Executive Committee.
(b) Article X, new Section 3, re Vice Speaker being member of The Council and its Executive Committee, when Speaker is absent.

8. Urged Michigan's component county societies to study any necessary changes in their By-Laws to the end that physicians who wish to become members of the American Medical Association (which now has annual dues) may be provided this opportunity.

9. (a) Heard John W. Cline, M.D., San Francisco, President of the American Medical Association, deliver an address to House of Delegates on September 25, and made Dr. Cline an Honoraray Member of the Michigan State Medical Society:
(b) Heard Robert C. Page, M.D., New York, speak on "Doctors and the Federal Medical System";
(c) Heard Grover C. Penberthy, M.D., Detroit, report on "Procurement of Medical Officers for Armed Services."

10. Approved the new MSMS sound/color film "To Save Your Life."

11. Elected Clayton Willison, M.D., Sault Ste. Marie, as Michigan's Foremost Family Physician for 1951.

12. (a) Elected twelve members to Emeritus Membership:
(b) Elected thirty-nine members to Life Membership:
(c) Elected fourteen members to Associate Membership:
(d) Elected fifteen members to Retired Membership:
(e) Elected two members to Honorary Membership:

13. Elected:
(a) L. W. Hull, M.D., Detroit, as Councilor of 1st District (1956).
(b) Ralph W. Shook, M.D., Kalamazoo, as Councilor of 4th District (1956).
(c) J. D. Miller, M.D., Grand Rapids, as Councilor of 5th District (1956).
(d) H. H. Hiscock, M.D., Flint, as Councilor of 6th District (1956).
(e) B. M. Harris, M.D., Ypsilanti, as Councilor of 14th District (1954).
(f) R. A. Johnson, M.D., Detroit, (1953), W. A. Hyland, M.D., Grand Rapids (1953), J. S. DeTar, M.D., Milan (1953), as Delegates to the American Medical Association.
(g) E. F. Sladek, M.D., Traverse City (1953), E. D. Spalding, M.D., Detroit (1953), W. W. Babcock, M.D., Detroit (1953), E. C. Texter, M.D., Detroit (1953) as Alternate Delegates to the American Medical Association.
(h) R. J. Hubbell, M.D., Kalamazoo, as President-Elect.
(i) R. H. Baker, M.D., Pontiac, as Speaker, House of Delegates.
(j) J. E. Livesay, M.D., Flint, as Vice Speaker, House of Delegates.

Organizational Activities

Michigan Postgraduate Clinical Institute and Heart Day

The fifth annual scientific institue held under the sponsorship of the Michigan State Medical Society in cooperation with the University of Michigan Medical School and Department of Postgraduate Medical Education, Wayne University College of Medicine, the Michigan Foundation for Medical and Health Education, Inc., and the Wayne County Medical Society was held in Detroit on March 14, 15, 16, 17, 1951.

This Institute, designed to provide a high type scientific program, encourage Michigan Physicians to prepare presentations and to publicize Michigan as a medical center, this year featured twenty-five Michigan doctors of medicine on the program and fourteen out of Michigan essayists.

The Institute was an outstanding success as evidenced by the fact that it produced a total registration of 1,579 with physicians present from Michigan, all nearby states and Canada.

County Secretaries—Public Relations Conference

A Conference of County Secretaries and other officers and members of component county groups was held in Detroit on January 21, 1951. This all-day conference was attended by over 200 County Society Officers, County Society Public Relations Committee Chairmen, Members of the Michigan State Medical Society Council, Legislative Committee and Public Relations Committee and Officers of the Woman's Auxiliary.

The year 1951 saw a continuation of the successful press conferences throughtout the state. Through these friendly conferences with newspaper editors, radio executives and their family physicians much mutual understanding and co-operation has developed.

In 1951 Michigan was accorded another delegate (making six in all) to the House of Delegates of the AMA Dr. Ralph A. Johnson, Detroit, was elected to this position by The Council.

On January 20, 1951, G. B. Saltonstall, M.D., Charlevoix, was appointed Councilor of the Ninth District to serve the unexpired term of E. A. Oakes, M.D., Manistee, resigned.

The Woman's Auxiliary celebrated its twenty-fifth Anniversary in 1951. Two issues of THE JMSMS featured this event and a scroll and silver gavel were presented to the Auxiliary in September, 1951, at the Annual Session.

Public Relations

The membership of the Michigan State Medical Society continues to be the driving force of the Public Relations Program. The collective scientific knowledge of the membership is a quantity coveted by all media such as press, radio, television, cinema, and publication. This is a giant pool of information.

The Public Relations Program of the Michigan State Medical Society transforms this pool of socio-scientific and socio-economic knowledge into interesting and informative radio programs, television productions, news releases, motion pictures, and local, state and national publications. The MSMS has utilized all media available to bring mutual understanding between the public and the doctors of medicine.

This program was carried forward in 1951—just as it will be in 1952—with new projects and with projects which have proved important in the past.

The total value of this program if estimated at current commercial advertising costs approximates over one million dollars.

One of these media is the press of the state and nation. Newspaper coverage of the 86th Annual Session

and the Michigan Clinical Institute, for example, was widespread and complete. Column inches of news space amounted to 1,687. In addition to advanced news releases and assistance to science writers covering the two events, publicity was obtained through appearances by doctors of medicine and MSMS representatives who gave speeches at four service clubs during the 86th Annual Session. Four special radio broadcasts, marked by the participation of eight doctors of medicine and two members of the Woman's Auxiliary, aired highlights of the Annual Session. In addition, frequent radio newscasts on the sixteen radio stations featured scientific news and statements by Michigan doctors of medicine and guest speakers who attended the Annual Session from other states.

Other activities in newspaper publicity included local meetings of the press by MSMS representatives, visits by the Public Relations Field Secretaries to newspapers in their assigned areas and 23 major releases issued at periodic intervals to all Michigan daily and weekly newspapers on newsworthy events of the Michigan State Medical Society. The MSMS also served as a source of health information on queries for newspaper stories by reporters as well as maintaining individual contact with science writers from major newspapers. MSMS continued its co-operation in publicizing special projects such as the work of special committees of MSMS and the Rural Health Conference. Excellent publicity was received on the occasion of the selection of Clayton Willison, M.D., Michigan's Foremost Family Physician for 1951. Dr. Willison subsequently was one of the three nominees chosen by the Board of Trustees of the American Medical Association to be voted upon by the AMA House of Delegates for the General Practitioner Gold Medal Award of 1951.

Besides activity in newspaper publicity, the story of the medical profession was graphically told in work accomplished by the Cinema Committee. In September of last year a new film "To Save Your Life" was completed. The 16 mm, sound, color motion picture is thirty minutes in length. It traces the steps necessary to become a doctor of medicine as well as showing representatives events in the life of a practicing M.D. Since it was offered for release in November for showing before such organizations as service clubs, Parent-Teacher Associations, vocational guidance classes in high schools and colleges, and television, there has been a heavy demand for the film. Already sixty-seven separate organizations have requested, "To Save Your Life," for screenings in Michigan in addition to requests from other states. The film is being offered to other state and county medical societies (outside Michigan) at a price of $300 a print.

The other two films of the Michigan State Medical Society were widely circulated. These films are, "Lucky Junior" and "To Your Health." As 1951 came to a close, "Lucky Junior" had been viewed by an audience of 380,622 theater patrons. "To Your Health" had been seen by an audience of 322,799 theater patrons. These are in addition to the persons seeing the picture in local showings. These films, along with "To Save Your Life" will continue to be scheduled in 1952.

Last year, the Cinema Committee began the first exploratory step to furnish additional services to doctors of medicine by the production of medical education films which would be used for instruction in medical schools and in postgraduate courses of study.

As the medium of television grew to gigantic proportion, the need became apparent that a new committee would have to be appointed which would be able to devote its energies exclusively to television. Such a television committee has been appointed as a subcommittee of the Public Relations Committee. The Michigan State Medical Society now has two television programs in the Detroit area. These programs are "It's Your Life" and "Your Medical Mailbox." The first television program is produced on WJBK-TV, Detroit, each week. The other show, "Your Medical Mailbox," is produced weekly on WXYZ-TV Detroit. Both programs feature Michigan doctors of medicine who discuss a variety of medical topics of interest to lay audiences. Each week these two programs reach an audience estimated at 1,000,000 persons. Special television shows have been made of our motion pictures over other television stations in Michigan and in other states.

Although the medium of television gained wide popularity, the Michigan State Medical Society did not overlook the continued importance of radio. The "Tell Me Doctor" five-minute health shows were broadcast on twenty-six Michigan radio stations. Several of these stations were located in areas not reached by television. This popular health show was launched by MSMS in 1946. In addition to the Michigan radio stations, transcriptions of the broadcast are aired by the medical societies of Oklahoma and North Carolina. Scripts for the broadcast of the program are also used by the Dade County Medical Association in Miami, Florida. Many other medical societies outside of Michigan have expressed an interest in these programs. Scripts numbering 1,488 have been written and 36,673 individual broadcasts of the program have been made in Michigan alone as of today.

During 1951 the radio committee also laid the groundwork for the production of a dramatic half-hour radio broadcast. Negotiations are already under way to produce this dramatic health show on a major Detroit radio station in September, 1952.

The MSMS Public Relations Program reached into the schools, colleges and universities. This was carried on under the auspices of the Committee on Education Programs in Schools and Universities.

One of the most far-reaching projects developed by this committee in 1951 was the Adult Education Program. This program was planned through the co-operation of the Adult Education Division of the Department of Public Instruction and the Michigan State Medical Society. As planned by this Committee, the component County Medical Societies of MSMS co-operate with their local Adult Education Directors in preparing a six-to eight-week lecture or discussion series on medical topics. This course was enthusiastically accepted by Adult Education Directors and is being carried forward successfully in several counties of the State.

A program to recruit medical associates was carried out by the distribution of the brochure, "In Planning Your Career" through vocational guidance classes of educational institutions.

Talks by MSMS representatives before school groups also proved beneficial in this program as well as on other subjects of the socio-health variety.

Many persons became aware of the activities of the Michigan State Medical Society by reading of these activities in publications published by both lay and medical organizations. Assistance was given the Woman's Auxiliary by the Public Relations Department in publishing their News Bulletin.

Other publications also expressed an interest in MSMS projects; *Parade, Newsweek,* Labor papers and special interest magazines. Noteworthy among these was the magazine *Inside Michigan* which is published in Detroit. The October, 1951, issue of this magazine carried a seven-page cover article, on the Michigan medical profession. This article was titled, "Return of the Family Doctor."

A total of 108,000 copies of this issue of the magazine were sent to Europe for distribution. Because of its popularity, 10,000 reprints were ordered by MSMS for distribution by doctors of medicine. These reprints were also circulated through the regular distribution channels of MSMS.

The Public Relations Department also offered services generally to officers and members of the Michigan State Medical Society in the preparation of arrangements for meetings, speeches, and brochures. Liaison with volun-

tary health agencies and other lay groups was also carried out in the Public Relations program. In addition, MSMS served the American Medical Association by participation in that organization's Public Relations Conference which included activity by Willis H. Huron, M.D., Iron Mountain. Other participation with the AMA encompassed the services of Hugh W. Brenneman, MSMS Public Relations Counsel, on the AMA Public Relations Advisory Board.

As in the past, the MSMS Public Relations Program continued to be recognized nationally as an outstanding PR effort. While new projects and programs were developed during 1951, the entire public relations effort has been included under the Formula For Freedom program in 1952. To energize the membership as well as to inform it in respect to this new program, the MSMS has organized a schedule of presentations before all the county medical societies of Michigan. These Formula For Freedom Nights began the last part of 1951 and are continuing into 1952. To date nineteen county societies have made firm commitments for Formula For Freedom Nights and three major societies (Kent, Kalamazoo and Saginaw) have been served in this respect.

Committees

Limitation of time and space makes it impossible to detail in this report the activities of all the committees contributing to the many splendid programs of the State Society. The accomplishment of the committees of the Society were achieved at the expense of many hours of personal sacrifice on the part of the personnel of the various committees. During 1951 the 62 committees of the Michigan State Medical Society held a total of 81 meetings and practically every meeting was attended by your Executive Director or Secretary. A total of 646 fellow members in your State Medical Society gave freely of their time to attend these meetings and assist in the operational activities of the State Society. Too much commendation cannot be accorded the committee members who contributed their time and effort to develop and execute constructive programs—both scientific and economic—for the public welfare and to maintain the position of leadership of the Michigan State Medical Society in the field of progressive medical planning.

Legislation

The pattern as set forth by the sixty-seventh (1951) Michigan Legislature was indicative of increasing attention to health matters. A total of 849 bills were introduced during the five-month session and sixty-nine of those bills were of primary concern to, or dealt directly with, the practice of medicine. The fight to retain the high standard of medicine for the people of this state was hard and long. It required many hours of time by Michigan doctors of medicine to accomplish this difficult task. No measure endangering the health of the people was passed. Much valuable progress, however, was made in legislation during the 1951 session.

Rather than attempt to review these I refer you to the Annual Report of the Legislative Committee (1950-51) copies of which you have all received in the Handbook of the House of Delegates.

One item might be mentioned, however, as an example of the outstanding *positive* work done. Out of the $306,000,000 state Budget, the first installment to Wayne University of $1,000,000 was granted and $3,500,000 authorized for construction of the Wayne University Medical Science building. As an example of the *protective* work done may I cite the activity that resulted in the refusal on two occasions of the Senate to confirm the appointment of an osteopath to the Michigan Crippled Children Commission.

The results of these two types of legislative activity are important and far-reaching.

However, victories in one session are past history in the next session. The year of 1952 sees us faced with an even greater task ahead. This session in the first two weeks produced 211 bills and of these forty-one concern doctors of medicine directly. Many of them are vicious pieces of proposed legislation. In addition we have much important legislation of our own to promote.

We are faced again with the need of "back home" support for it is politically naïve to fail to recognize that politicians listen most closely to their most enthusiastic and effective supporters in their home areas.

Rheumatic Fever Program

This Society-sponsored program of consultation and diagnosis in the field of Rheumatic Fever demonstrates the voluntary approach in the field of preventive medicine. The Michigan Society for Crippled Children and Adults, Inc., has continued its financial support of this program as has the Michigan Heart Association.

We must emphasize that the Rheumatic Fever program is a voluntary effort of the medical profession of this State, aided financially by three other voluntary groups, to demonstrate its ability to conduct successful programs in the field of Public Health; that it is an educational effort both for physicians and the public; that it is being viewed with interest and sometimes envy by other groups and agencies; and that if it fails for lack of support by the individual physicians and county medical societies of the state the medical profession will be open to ridicule and further attempts to bring into the doctors' supervision the remaining modern procedures of medical practice—(viz., Rheumatism, Arthritis, Cerebral Palsy, Epilepsy, et al) will be impossible. During 1951 considerable progress has been made toward expanding this program with new centers throughout the state.

Contacts With Governmental Agencies

During 1951 your Society maintained active and friendly contacts with many governmental agencies at local county, state and national levels. Included in these contacts were:

The Governor of Michigan
The Michigan Crippled Children Commission
The State Board of Registration in Michigan
Michigan Civil Service Commission
Michigan's Attorney General
The State Department of Public Instruction
The University of Michigan
The Michigan State College
Wayne University
Michigan Social Welfare Commission
The U. S. Senators and Congressmen from Michigan
White House Conference on Children and Youth
The State Health Commissioner
National Emergency Medical Service
The Michigan Mental Health Commission
Procurement and Assignment
Little Hoover Commission
EMIC Program.

Contacts With Non-Governmental Agencies

During 1951 the usual active contacts were maintained with many non-governmental agencies—especially

Michigan Medical Service
Michigan Hospital Service
Michigan Society for Crippled Children and Adults, Inc.
Michigan Health Council
The Michigan Tuberculosis Association
The Michigan Foundation for Medical and Health Education
The Michigan Heart Association
The Rural Health Conference and its ninety-eight other groups
The National Foundation for Infantile Paralysis
American Cancer Society
American Red Cross

National Conference on Medical Service
Conference of Presidents and Other Officers of State Medical Associations
Associated Postgraduate Committee and numerous other groups

Society Activities

Many contacts were made during the year with members of the Society at Councilor District Meetings and County Society Meetings. These contacts were made by various members of the administrative personnel and were designed to publicize the various activities of the State Society and to allow a discussion of any question propounded by the members present. These meetings developed a critical discussion of the problems of the local and State organizations, problems of the public relations, the "dispractices" of medicine and other subjects bearing upon the development and maintenance of activities necessary to the establishment of medical practice on its deserving high plane.

Officers attended numerous Michigan county and district medical society meetings during the year and were honored by being invited to speak before many other organizations in and out of the state. Their presentations before lay and civic organizations during the past twelve months, as part of the Good Citizenship Campaign, totaled hundreds of appearances, with messages beamed to the theme that voluntary medicine has achieved the best results for the people's benefit and is to be preferred to a compulsory federally operated type of political foreign medicine.

Especially to be commended are the high quality scientific postgraduate "clinic days" being offered by county and district medical societies annually including: Bay, Calhoun, Grand Traverse, Genesee, Ingham, Jackson, Kent, St. Clair, and Wayne Counties and by the Upper Peninsula Medical Society.

Secretary's Letters

As part of the Society's general educational program for individual members and component County Societies there were issued during the year 1951, twelve Secretary's Letters, nine to county secretaries and keymen and three to all members of the Michigan State Medical Society.

Office Personnel

During 1951 the Executive Office Personnel has discharged its many duties with extra loyalty and untiring effort.

During 1951 several additions were made to the stenographic staff. Mr. Jack Kantner was employed as Assistant Public Relations Counsel to replace Mr. Russell F. Staudacher who resigned to accept a position with the AMA.

The previously crowded and scattered condition of our Executive Offices was on its way to solution in 1951 by the purchase of a new home at 606 Townsend Street, Lansing. When all the necessary alterations and improvements will have been made, the already high standard of efficiency in the Executive Offices should be greatly enhanced.

The new building will enable the Society to house its personnel in one building and city. Dr. Rector, Secretary of the Cancer Committee, has already moved his office from Jackson to the new home of the Society.

Foremost Family Physician Award

The fifth annual "Foremost Family Physician Award" was accorded Clayton Willison, M.D., of Sault Ste. Marie. The award will be officially made in March, 1952, on the occasion of the Michigan Clinical Institute.

Recommendations

As a result of a careful analysis of the Society's activities, the prospective economic conditions and the attitude of the public toward medical organizations, I respectfully submit the following recommendations for your consideration: That

1. Continued efforts be put forth to develop and maintain strong organizations (County Medical Societies) at the grass-roots level.
2. The Medical Organizations continue the further development and execution of the Good Citizenship campaign through the "Formula For Freedom" for 1952 and 1953.
3. Members of Hospital Staffs be contacted with a view to solving in each institution the problems of over-utilization of Blue Cross-Blue Shield.
4. Consideration be given to the proper type of exploration of mutual problems facing labor and the medical profession.
5. An MSMS Brochure "Guide to Services" be developed by the Public Relations Department for distribution to all MSMS Members, with extra copies to County Society Officers.
6. That cost items of 606 Townsend Street, Lansing, be segregated and be indicated in the annual budgets and in the books and audit as a separate item in the General Fund section of the budget and books.
7. That after a reasonable length of time to determine amount of funds coming in, if deemed necessary, a professional organization be employed to manage the Beaumont Memorial Restoration campaign for funds in order to achieve the aim in 1952, and that appreciation be expressed to Mr. W. F. Doyle, Chairman, and to the Mackinac Island State Park Commission for their splendid co-operation.
8. A questionnaire survey regarding M.D. availability be made, per the presentation as made recently to the Executive Committee.

Your Secretary desires to express to the members of The Council his sincere appreciation for their fine personal and collective co-operation and the encouragement they have accorded him during 1951.

To the Executive Office personnel, to Mr. H. W. Brenneman, Public Relations Counsel, Mr. John B. Kantner, assistant counsel, Mr. J. Joseph Herbert, Legal Counsel, Dr. Wilfrid Haughey, Editor, and Mr. Robert J. Roney, Assistant Executive Director, your Secretary is particularly grateful for their loyalty, willing application to their many tasks, and many constructive suggestions. To Executive Director Mr. Wm. J. Burns, I wish to express a special appreciation for his wise counsel, helpful co-operation, and dynamic inspiration.

To all those who have aided so generously in the discharge of the duties of his office, your Secretary is most grateful.

Respectfully submitted,
L. FERNALD FOSTER, M.D.
Secretary

EDITOR'S ANNUAL REPORT—1951

THE JOURNAL of the Michigan State Medical Society has completed the fiftieth year of publication. Research during the year has disclosed that THE JOURNAL was first published in September instead of January, 1901, as we had supposed, and that we will publish the 600th number in August, 1952. We are entering the fifty-first year of continuous publication. During all these years THE JOURNAL has been the expression and workshop of the Councilors and Publication Committee, carrying to our members the plans, ambitions, hopes, and accomplishments of the medical profession of the great State of Michigan. It has been the responsibility of your officers,

TREASURER'S ANNUAL REPORT—1951

SECURITIES IN POSSESSION OF THE TREASURER
January 1, 1952

Description	Interest Rate	Maturity	Interest Paid To	Principal Amount	Cost	Market or Redemption Prices 12-31-51	Market or Redemption Prices 12-22-51	Interest Received For Period
Bonds held for general purposes:								
U. S. Savings Bonds, Series G	2½%	3-1-60	9- 1-51	$ 5,000.00	$ 5,000.00	$ 4,740.00	$ 4,780.00	$ 125.00
U. S. Savings Bonds, Series G	2½%	5-1-58	11- 1-51	5,000.00	5,000.00	4,760.00	4,735.00	125.00
U. S. Treasury Bonds, Series A	1½%	3-15-55	9-13-51	15,000.00	14,993.79	14,728.13	Note B	225.00
U. S. Treasury Note, Series A	1⅜%	3-15-54	9-13-51	3,000.00	2,965.07	2,955.00	Note B	20.61
U. S. Treasury Bond, Series B	2¾%	4- 1-80/75	10- 2-51	8,000.00	8,000.00	7,790.00	Note C	110.00
Bonds held for Public Education Program:								
U. S. Savings Bonds, Series G	2½%	8- 1-58	8- 1-51	30,000.00	30,000.00	28,470.00	28,410.00	750.00
Bond exchanged May 7, 1951:								
U. S. Treasury Bonds ($8,000.00)	2½%							58.79
Group of Bonds redeemed Aug. 1, 1951:								
U. S. Savings Bonds, Series G, 2½% Principal Amount		$17,600.00						440.00
U. S. Savings Bond , Series G, 2½% Principal Amount		5,000.00						62.50
U. S. Savings Bond , Series G, 2½% Principal Amount		5,000.00						62.50
U. S. Savings Bond , Series G, 2½% Principal Amount		1,000.00						12.50
U. S. Savings Bonds, Series F, A Principal Amount		2,500.00						
U. S. Savings Bonds, Series F, A Principal Amount		700.00						
U. S. Savings Bonds, Series F, A Principal Amount		12,400.00						
U. S. Savings Bonds, Series F, A Principal Amount		6,000.00						
U. S. Savings Bonds, Series F, A Principal Amount		500.00						
		$50,700.00		$66,000.00	$65,958.86	$63,443.13	$37,925.00	$ 1,991.90

Note A—Bonds purchased on discount basis. Do not bear interest.
Note B—Bonds purchased in 1951
Note C—Bond received in exchange for Treasury Bonds, Series A

CHANGES IN BONDS IN POSSESSION OF TREASURER DURING THE YEAR WERE AS FOLLOWS:

BALANCE AT JANUARY 1, 1951 (Principal Amount) $98,700.00

ADDITIONS

Purchase of U. S. Treasury Bonds, Series A, 1½%, maturing Mar. 15, 1955, Principal Amount $15,000.00
(This Bond was purchased at the Home Office Mar. 29, 1951, paid for out of the general funds of the Society, and transmitted to the Treasurer for safekeeping.)

Purchase of U. S. Treasury Note, Series A, 1⅜%, maturing Mar. 15, 1954, Principal Amount ..... $ 3,000.00
(This Bond was purchased Apr. 30, 1951, out of interest received on interest bearing Bonds.)

In exchange U. S. Treasury Bond, Investment Series B, 2¾%, maturing Apr. 1, 1980/75, Principal Amount ..... $ 8,000.00
(This Bond was received in exchange for U. S. Treasury Bond, Series A, 2½%, Principal Amount $8,000.00. It is not marketable but may be exchanged for 1½% 5-yr. U. S. Treasury Notes, which are marketable—the market quotation of 5-yr. notes as of Dec. 31, 1951 is 97-12/32.) ..... $ 26,000.00

..... $124,700.00

DEDUCTIONS

Group of Bonds redeemed Aug. 1, 1951, Principal Amount $50,700.00
(Above Bonds sold for Redemption Price) $44,512.60
Less bank service fee 3.95

$44,508.65
(The proceeds derived from sale of Bonds was transmitted to the general funds of the Michigan State Medical Society for the purchase of a "Home Office."

U. S. Treasury Bonds, Series A, 2½%, maturing Dec. 1972/76, Principal Amount ..... $ 8,000.00
(This Bond was exchanged for a U. S. Treasury Bond, Investment Series B, 2¾%, May 7, 1951, and maturing April 1, 1980/75) 58,700.00

TOTAL PRINCIPAL AMOUNT OF BONDS ..... $ 66,000.00

REPRESENTED BY—

Bonds for general purposes $36,000.00
Bonds designated for Public Education Program 30,000.00

INCOME

CASH BALANCE IN BANK, January 1, 1951 ..... $ 2,556.39
EARNINGS ON BONDS (Jan. 1, 1951 to Jan. 1, 1952) ..... $ 1,991.90
PROCEEDS FROM GROUP OF BONDS SOLD (Aug. 1, 1951) $44,508.65

$46,500.55

TOTAL INCOME $49,056.94

EXPENSE

The Detroit Bank charges for safekeeping of Bonds:
Jan. 3, 1951 ..... $ 48.85
May 10, 1951 ..... 50.00
Nov. 9, 1951 ..... 41.50
Cost of purchasing U. S. Treasury Note, Series A, 1-⅜%, due March 15, 1954 ..... $ 2,965.07
Transfer of proceeds from sale of Group of Bonds to general fund for purchase of "Home Office" $44,508.65

$47,614.07

CASH BALANCE IN BANK January 1, 1952 $ 1,422.87

CASH BALANCE IN THE DETROIT BANK, January 1, 1952 ..... $ 1,422.87
MARKET or REDEMPTION PRICES OF ALL BONDS, in possession of the Treasurer, January 1, 1952 ..... $63,443.13

TOTAL CASH and REDEMPTION VALUE OF BONDS $64,866.00
(as of January 1, 1952)

Respectfully submitted,

A. S. BRUNK, M.D., *Treasurer*
(Deceased February 3, 1952)

and especially of your editors, to present a constant flow of scientific medical articles, to give our membership the latest thought in medical economics and medical news, and to stimulate the meeting of minds which determines and directs the advance of the profession.

Again THE JOURNAL has published an average number of pages commensurate with the policy of recent years. The years and number of pages follows:

1942—1090; 1943—1022; 1944—1134; 1945—1414; 1946—1692; 1947—1478; 1948—1446; 1949—1566; 1950—1526; 1951—1470.

The increase in numbers of pages from a hundred or less per issue to the present approximate one hundred twenty pages was an expression of the increased threat of socialized medicine, and our efforts to uncloak the monster. We have not begrudged the time and "pages." We believe the Michigan State Medical Society through its combined fighting spirit has given its full share to the fight.

During the year 1951, we published papers from 161 authors. A number of these papers had more than one author, but there were only eleven name repeats during the year, showing that the authorship of papers was as widely spread as possible, covering 150 separate names. Eighty-one book reviews have been presented, most of which have been by reviewers in the home city of the editor, for obvious reasons. During the years, the editor himself has reviewed many of these books and placed them in the library of one of our hospitals.

Forty-four editorials have been prepared with the single thought in mind to express the considered program, opinion and considered deductions of The Council which is our governing body, under whose egis THE JOURNAL was established and has been maintained. We hope we have, in a measure, succeeded.

We have again continued to make each number of THE JOURNAL some special expression of a co-ordinate part or function of the Society. For many years, there have not been two identical covers. In fact, we have made the covers entirely different from each other, but attractive and suggestive. The covers and THE JOURNALS from 1951 have been as follows:

January: The Clinical Institutes announcement, with pictures of nine of the speakers.

February: "Please give a hand—Help Crippled Children," with the picture of a girl in braces.

March: The first Atomic Energy Journal ever published, with an atomic burst through a blue sky with complicated atomic formulae.

April: Completely devoted to papers on cancer, with a cover illustration of the first use of television in medicine, a Michigan accomplishment.

May: Featuring Michigan's Foremost Family Physician, Dr. Lunette I. Powers; this number also greeted the American Medical Association on its having attained the entrance into its second century.

June: Devoted as for several years to Michigan's Blue Shield, commemorating its 2,000,000 subscribers.

July: The annual roster number, again featuring the Michigan map with the divisions into county or local societies, with membership numbers inserted.

August: The program number for the annual session, featuring the hospitality booth.

September: This was the Rheumatic Fever and Arthritis number, devoted exclusively to that subject. The cover was outstanding. A nurse wheeling a patient out of a dark room into the light of arthritis research. One reader from Chicago thought this cover should be reprinted and hung in every doctor's office.

October: The Michigan Foundation for Medical and Health Education, featuring a construction job.

November: In this number we complimented our most efficient and the nation's most beloved and admired lay medical executive. A beautiful picture of Mr. Burns.

December: The "Serving the Hearts of Michigan," a number devoted completely to papers prepared in conjunction with the grants, subsidies and research projects of the Michigan Heart Association.

Plans are in the making to continue the feature numbers and covers. We believe THE JOURNAL of MSMS, by its novel arrangement, has established a place in the sun.

Respectfully submitted,

WILFRID HAUGHEY, M.D., *Editor*

REPORT OF MADAN AND BAILEY, C.P.A.

January 12, 1952

The Council, Michigan State Medical Society,
Lansing, Michigan

Gentlemen:

In accordance with our engagement, we have examined the books and records of the Michigan State Medical Society, Lansing, Michigan, for the period December 23, 1950 to December 24, 1951, and we present herewith our report of examination.

Your attention is directed to the following comments respecting some of the more important items appearing in your records.

The Michigan State Medical Society was organized on September 17, 1910, under the laws of the State of Michigan, as a non-profit corporation. The charter has been extended for a period of thirty years from September 17, 1940. The Society is affiliated with the American Medical Association, and it charters county medical societies within the State of Michigan. The purposes of the Society are the promotion of the science and art of medicine, the protection of the public health, and the betterment of the medical profession. In the furtherance of these purposes, the Society publishes THE JOURNAL of the Michigan State Medical Society.

The balance on deposit in the Michigan National Bank, Lansing, Michigan, was reconciled by us and further confirmed by direct correspondence with the bank. The Treasurer's account maintained at the Detroit Bank, Detroit, Michigan, was confirmed by direct correspondence with the depository. Office cash was counted by our representative and found to be in agreement with the ledger account.

Accounts Receivable were confirmed by direct correspondence with the debtors. To date of this report we have not heard from all persons who were written. Some small differences have been noted, and are to be followed up by your representatives. The aging of the accounts by month of charge is as follows:

October, November and December, 1951	$11,219.45
July, August and September, 1951	302.87
January to June, 1951	57.83
Prior to 1951	0
TOTAL	$11,580.15

U. S. Government securities are set forth in detail in Schedule. The changes in the balance of the bond account during the period are as follows:

Balance December 23, 1950		$93,823.89
Bonds Acquired:		
U. S. Treasury Bonds, "A", 1½%	$14,993.79	
U. S. Treasury Note, Series "A", 1-⅜%	2,965.07	
U. S. Treasury Bonds 2-¾%, 1980/75 exchanged	8,205.26	26,164.12
TOTAL		$119,988.01
Bonds Disposed Of:		
Sale per Note "A" Schedule 6	$45,605.80	
U. S. Treasury Bonds 2½%, 1972/67 exchanged	8,218.09	53,823.89
Balance December 24, 1951		$66,164.12

All securities are held in safekeeping in The Detroit Bank, Detroit, Michigan, and were confirmed by direct correspondence with the bank.

The deeds for the Home Office Building, 606 Town-

send Street, Lansing, Michigan, are dated July 10, 1951. Depreciation has been computed on a twenty-five (25) year life. Six months' depreciation was taken for 1951.

Insurance is carried on the Home Office Building in an amount of $49,000.00, and $10,000.00 on contents.

During the period under review, the Society received $115,647.50 in collections of assessments levied by the American Medical Association on its members. All such collections were paid to the American Medical Association, and this amount is not reflected in the Society's financial statements.

Membership dues received during the year were reconciled to the 5,137 membership cards issued.

Sales of booth space at the Annual Session and the Michigan Clinical Institute were traced to the income accounts in the ledger.

Changes in the various reserves for special purposes, and the addition of such reserves during the period are set forth in Exhibit "C".

It is our recommendation that more expenses be charged to specific expense accounts rather than to "Miscellaneous Expense." This can be accomplished by not restricting the purpose of some of the accounts. Travel Expense could include Entertainment. Your accountant is limited in his charges for certain special activities, such as the Michigan Clinical Institute and Annual Session. This can be corrected when setting up the 1952 budget, thereby simplifying the work and allocation problems of your Accounting Department.

Respectfully submitted,
MADAN AND BAILEY,
Certified Public Accountant

STATEMENT OF ASSETS, LIABILITIES AND EQUITIES

December 24, 1951

ASSETS

Cash on Hand and in Banks:			
Michigan National Bank, Lansing, Mich.	$73,161.02		
Treasurer's Account, The Detroit Bank, Detroit, Michigan	1,442.87		
Office Cash	36.61		$ 74,640.50
Accounts Receivable:			
Booth Space at 1952 Postgraduate Clinical Conference	$7,825.00		
Advertising and Other Items	3,755.15	$11,580.15	
Less: Allowance for Doubtful Accounts		294.00	11,286.15
Investments:			
U. S. Government Securities (Schedule 6) (Note 1) (Market or Redemption Price $63,443.13)			$ 66,164.12
Property:			
Office Building, Lansing, Michigan	$45,000.00		
Less: Depreciation Allowance		900.00	44,100.00
Prepaid Expenses:			
Expenses of 1952 Postgraduate Clinical Conference	$ 629.72		
Advances for Meeting December 27, 28 and 29, 1951		250.00	879.72
Other Assets:			
Furniture Held for Resale			415.00
TOTAL ASSETS			$197,485.49

NOTE 1. United States Government Bonds in the amount of $30,000.00 have been designated as applicable to the Public Education Program.

LIABILITIES

Accounts Payable:			
Federal Unemployment Taxes	$ 331.98		
Michigan Unemployment Taxes	51.74		
Current Expenses	4,967.45		
Refunds Due Counties on American Medical Association Dues	1,151.72		
Michigan Hospital Service (credit)	11.58		$ 6,491.31
Unearned Income:			
January 1952 Advertising	$ 64.52		
Booth Space at 1952 Postgraduate Clinical Conference	10,610.00		10,674.52
Society Equities:			
Reserve for Special Purposes:			
Public Education Reserve	$30,000.00		
Public Education Program	32,055.98	$ 62,055.98	
Rheumatic Fever Control Program		26,431.80	
Lecture Grant		300.00	
Beaumont Memorial Fund		4,000.00	
Contingent Fund		7,117.81	
Building Fund		9,490.42	
		$109,396.01	
Unallocated Equity	$58,268.41		
Net Income for the Period (Exhibit "B")	12,655.24	70,923.65	
			180,319.66
TOTAL LIABILITIES AND EQUITIES			$197,485.49

STATEMENT OF INCOME AND EXPENSE

December 23, 1950 to December 24, 1951

Income:			
Membership Fees	$95,367.75		
Miscellaneous Income	344.10		
Interest Income:			
On Securities (Less Amortization of $12.83)	1,979.07		
On Savings Deposits	8.01		$ 97,698.93
Other Income:			
Annual Session (Schedule 2)	$ 1,546.34		
Postgraduate Clinical Institute (Schedule 2)	1,885.90		
"THE JOURNAL" (Schedule 3) (loss)	785.90		2,646.34
TOTAL INCOME			$100,345.27
Expenses:			
Administrative and General (Schedule 1)	$44,216.73		
Society Activity (Schedule 1)	19,408.04		
Committee Expenses (Schedule 1)	22,827.76		
Loss on Sale of Bonds	1,097.15*		
Fees for Safekeeping of Bonds	140.35		87,690.03
NET INCOME			$ 12,655.24

*Not including interest gained since purchase.

INCOME AND EXPENSE SUMMARY

December 23, 1950 to December 24, 1951

	Balance 12-23-50	Income for the Period	Expenses for the Period	Net Gain or Loss	Balance 12-24-51
Equity—General Fund	$ 58,268.41	$ 97,698.93	$ 87,690.03	$ 10,008.90	
Annual Session		22,610.00	21,063.66	1,546.34	
Postgraduate Institute		11,510.00	9,624.10	1,885.90	$ 70,923.65
"THE JOURNAL"		57,749.69	58,535.59	785.90 (Loss)	
Contingent Fund		7,117.81	0	7,117.81	7,117.81
Building Fund		9,490.42	0	9,490.42	9,490.42
Beaumont Memorial Fund		4,000.00	0	4,000.00	4,000.00
Lecture Grant	400.00	0	100.00	100.00 (Loss)	300.00
Public Education Program	59,600.98	95,726.00	93,271.00	2,455.00	32,055.98*
Public Education Reserve	0	0	0	0	30,000.00
Rheumatic Fever Control Program	23,467.55	23,373.15	20,408.90	2,964.25	26,431.80
TOTALS	$141,736.94	$329,276.00	$290,693.28	$ 38,582.72	$180,319.66

*Attention is directed to the Note on Page 368 under Public Relations Program.

EXPENSES

December 23, 1950 to December 24, 1951

Administrative and General:	
Office Rent & Light (Property Taxes $580.50)	$ 1,738.25
Printing and Mailing	256.36
Office Supplies	1,905.36
Postage	1,978.60
Insurance and Fidelity Bonds	4,349.78
Auditing	840.04
Salaries—Administrative	7,500.00
Salaries—General Office	10,555.84
General Counsel Retainer	3,960.00
General Counsel Expenses	310.20
Equipment and Repairs	2,833.99
Telephone and Telegraph	3,092.65
Payroll Taxes	1,618.23
Miscellaneous Expenses	1,117.44
Building Maintenance	1,259.99
Depreciation (4% for 6 Months)	900.00
TOTAL ADMINISTRATIVE AND GENERAL	$44,216.73
Society Activity:	
Council Expense	$ 9,614.01
Delegates to American Medical Association	2,150.83
General Society Travel and Entertainment	4,281.53
Secretary's Letters	1,082.63
Woman's Auxiliary	969.10
Officers' Travel	1,309.94
TOTAL SOCIETY ACTIVITY	$19,408.04
Committee Expenses:	
Legislative & Legislative Advisory Committee	$ 2,227.24
Postgraduate Medical Education	3,573.69
Preventive Medicine	91.15
Cancer Control	5,000.00
Child Welfare	111.20
Geriatrics	142.28
Industrial Health and Industrial Health Day	361.29
Maternal Health	847.12
Mental Hygiene	311.63
Scientific Radio	22.50
Venereal Disease Control	193.56
Tuberculosis Control	238.99
Distribution of Medical Care	215.31
Michigan Health Council	7,500.00
Rural Medical Service	332.10
Emergency Medical Service	228.22
Committees of House of Delegates and of The Council	1,431.48
TOTAL COMMITTEE EXPENSES	$22,827.76
TOTAL EXPENSES	$86,452.53

INCOME AND EXPENSE

December 23, 1950 to December 24, 1951

ANNUAL SESSION

Scientific Meeting	$ 3,658.36
Registration	414.75
Exhibit Expense	3,146.82
Hotel Expense (MSMS Staff)	538.20
Officers' Night and Biddle Lecture	452.42
State Society Night	2,783.25
Printing, Mailing and Postage	2,639.51
Press Expense	1,043.77
Projection Expense	81.50
Salaries	4,299.98
House of Delegates Expense	1,040.60
Miscellaneous Expense	964.50
TOTAL ANNUAL SESSION EXPENSE	$21,063.66
Less: Income from Booth Sales	22,610.00
GAIN ON ANNUAL SESSION	$ 1,546.34

POSTGRADUATE CLINICAL INSTITUTE

Scientific Meeting	$ 2,029.72
Committee Meetings	184.22
Printing, Mailing and Postage	1,561.11
Exhibit Expense	1,587.75
Press Expense	656.48
Registration	151.51
Hotel Expense (MSMS Staff)	1,260.21
Salaries	2,100.12
Miscellaneous Expense	92.98
TOTAL POSTGRADUATE CLINICAL INSTITUTE EXPENSE	$ 9,624.10
Less: Income from Booth Sales	11,510.00
GAIN ON POSTGRADUATE CLINICAL INSTITUTE	$ 1,885.90

THE JOURNAL

December 23, 1950 to December 24, 1951

Income:	
Subscriptions from Members	$ 7,163.77
Subscriptions—Others	475.41
Advertising Sales	45,080.25
Reprint and Cut Sales	4,355.24
Cash Discounts Received	675.02
TOTAL INCOME	$57,749.69
Expenses:	
Editors' Expense	$ 1,800.00
Printing and Mailing	32,419.17
Reprint and Cut Expense	3,081.50
Ealaries	10,839.98
Discount and Commissions on Advertising Sales	10,093.49
Miscellaneous Journal Expense	120.34
Cash Discounts Allowed	181.11
TOTAL EXPENSE	$58,535.59
NET LOSS ON "THE JOURNAL"	$ 785.90

PUBLIC EDUCATION PROGRAM

December 23, 1950 to December 24, 1951

Income from Memberships	$95,525.00
Miscellaneous Income	201.00
	$95,726.00
Expenses:	
Clipping Service	$ 200.03
Committee Meetings	879.22
Equipment and Repairs	934.17
Postage and Mailing	2,181.36
Printing	754.62
Office Supplies	910.75
Rent and Light	700.00
Rent to Wayne Co. Med. Soc.	240.00
Salaries	38,927.46
Telephone and Telegraph	2,306.05
Travel	9,239.99
Cinema	6,577.77
Display Advertising	469.00
Publications and Pamphlets	964.02
Radio "Tell Me, Doctor"	23,933.09
National Meeting Expense	752.28
County Secretary's—P. R. Conf.	2,522.21
Miscellaneous Expense	348.85
County Society Meetings	413.54
Field Secretary	16.59
TOTAL EXPENSES	$93,271.00
NET OPERATING GAIN BEFORE APPROPRIATION	$ 2,455.00

NOTE: Your Committee, at the beginning of the year, allocated $30,000.00 of 1951 income to a Public Education Reserve. This amount has been set aside, and is not reflected in the above statement of Income and Expense.

RHEUMATIC FEVER CONTROL PROGRAM

December 23, 1950 to December 24, 1951

Income:	
Grant from Michigan Heart Association	$19,873.15
Michigan Society for Crippled Children and Adults, Inc.	3,500.00
TOTAL INCOME	$23,373.15
Expenses:	
Central Office:	
Committee Meetings	$ 594.28
Equipment and Repairs	6.24
Payroll Taxes	125.19
Printing and Mailing	544.69
Administrative Salaries	8,800.00
Central Office Salaries	699.96
Travel	1,122.60
Miscellaneous	98.90
Fellowships	2,000.00
TOTAL CENTRAL OFFICE EXPENSE	$13,991.86
Control Centers:	
Ann Arbor	$ 400.00
Bay City	625.00
Detroit	78.10
Grand Rapids-Muskegon	2,598.95
Kalamazoo	811.09
Lansing	306.58
Marquette	162.67
Pontiac	500.00
Traverse City	734.65
Northern Michigan	200.00
TOTAL CONTROL CENTER EXPENSE	$ 6,417.04
TOTAL EXPENSES	$20,408.90
INCREASE	$ 2,964.25

MICHIGAN STATE MEDICAL SOCIETY
BUDGETS—1952

GENERAL FUND

Income:	
4500 Members @ $45.00	$202,500.00
Less: Allocation to THE JOURNAL @ $1.50	6,750.00
Allocation to Public Education @ $20.00	90,000.00
Allocation to Surplus @ $1.50	6,750.00
Allocation to Building Fund @ $2.00	9,000.00
Balance to General Fund @ $20.00	$ 90,000.00
Interest Income	800.00
Miscellaneous Income	300.00
TOTAL FUNDS AVAILABLE	$ 91,100.00
Expenses:	
Administrative & General:	
Printing & Mailing	$ 250.00
Office Supplies	2,500.00
Postage & Express Charges	2,500.00
Insurance & Fidelity Bonds	3,750.00
Auditing	350.00
Salaries—Administrative	8,700.00
Salaries—Office	12,740.00
General Counsel Retainer	3,960.00
General Counsel Expenses	350.00
Equipment & Repairs	2,000.00
Telephone & Telegraph Charges	3,000.00
Payroll Taxes	1,800.00
Miscellaneous Expense	500.00
Total Administrative & General Expense	$ 42,400.00
Society Activity:	
Council Expense	$ 8,000.00
Delegates and Alternates to AMA	4,000.00
Gen. Society Travel & Ent.	3,500.00
Officers Travel	3,000.00
Secretary's Letters	1,200.00
Woman's Auxiliary	250.00
Nat. Conf. on Medical Service	150.00
Sundry Society Expense	150.00
Total Society Activity Expenses	$ 20,600.00
Committee Expenses:	
Legislative	$ 2,200.00
Postgraduate Medical Education	4,000.00
Preventive Medicine	100.00
Cancer Control	4,580.00
Child Welfare	100.00
Geriatrics	150.00
Industrial Health & Industrial Health Day	400.00
Maternal Health	700.00
Mental Hygiene	300.00
Mental Hygiene	300.00
Scientific Radio	50.00
Venereal Disease	150.00
Tuberculosis Control	150.00
Distribution of Med. Care	200.00
Michigan Health Council	7,500.00
Rural Medical Service	250.00
Emergency Medical Service	200.00
Procurement & Assignment	150.00
Beaumont Restoration	150.00
Courses on Medical Economics	200.00
Sundry Committee Expense (including House of Delegates & Council Committees)	1,000.00
Total Committee Expense	$ 22,530.00
TOTAL EXPENSES	$ 85,530.00
GAIN FOR THE YEAR	$ 5,570.00
BALANCE FROM 1951	$ 70,923.65
NET TO 1953	$ 76,493.65

BUILDING MAINTENANCE FUND

ACCOUNT TITLE	1952 Budget
Income:	
1951 Allocation of Dues	$ 9,000.00
1952 Allocation of Dues	9,000.00
	$18,000.00
Expenses:	
Replacements:	
Lighting	2,000.00
Decorating	2,000.00
Repairs to parking lot	2,000.00
Heating and Hot Water	600.00
Lighting	200.00
Water	70.00
Salary of Janitor	2,600.00
Janitor's Supplies	140.00
Taxes	600.00
Fire Insurance	500.00
Misc. Expense	400.00
General Repairs	500.00
Depreciation	1,800.00
	$13,410.00
Balance to 1953	4,590.00

ANNUAL SESSION—1952

Income:	
Booth Sales (99 spaces)	$20,000.00
Expenses:	
Scientific Meeting Expense	3,300.00
Registration	300.00
Exhibit Expense	3,000.00
Hotel Expense (MSMS Staff)	500.00
Officer's Night & Biddle Lecture	500.00
State Society Night	3,000.00
Printing, Mailing & Postage	2,500.00
Press Expense	800.00
Scientific Work Committee	200.00
Salaries	4,300.00
House of Delegates Expense	800.00
Telephone & Telegraph	200.00
Miscellaneous Expense	600.00
Total Expenses	$20,000.00

MICHIGAN CLINICAL INSTITUTE—1952

Income:	
Booth Sales (70 spaces)	$11,720.00
Expenses:	
Scientific Meeting Expense: (include Civil Defense Speaker)	2,300.00
Registration	150.00
Exhibit Expense	1,800.00
Hotel Expense (Include Entertainment)	1,540.00
Printing, Mailing & Postage	2,250.00
Press Expense	800.00
Salaries	2,100.00
Telephone & Telegraph	100.00
MCI Committee Meetings	180.00
Miscellaneous Expense	500.00
Total Expenses	$11,720.00

THE JOURNAL—1952

Income:	
4500 members @ $1.50	$ 6,750.00
Subscription of others	475.00
Advertising Sales	48,915.00
Reprint & Cut Sales	4,300.00
Misc. Income (Discounts taken)	700.00
TOTAL FUNDS AVAILABLE	$61,140.00
Expenses:	
Editor's Expense	$ 2,400.00
Printing, Mailing & Postage	34,000.00
Reprint & Cut Expense	3,000.00
Salaries	10,840.00
Disc. & Comm. on Adv. Sales	10,800.00
Miscellaneous Journal Expense	100.00
TOTAL EXPENSES	$61,140.00

PUBLIC EDUCATION PROGRAM—1952

Income:	
4500 members @ $20.00	$90,000.00
Other Income (Sale of films, pamphlets, "Tell Me, Doctor" radio programs, etc.)	1,200.00
TOTAL FUNDS AVAILABLE	$91,200.00
Expenses:	
Clipping Service	$ 300.00
Committee Meetings	1,500.00
Equipment & Repairs	800.00
Postage & Mailing	3,500.00
Printing	1,000.00
Office Supplies	1,000.00
Allocation of Bldg. Maintenance Expense	900.00
Rent to Wayne County Medical Society	240.00
Salaries	41,000.00
Telephone & Telegraph	4,000.00
Travel & Entertainment	8,000.00
Cinema	5,000.00
Display Advertising	500.00
Newspapers	2,500.00
Publications & Pamphlets (Purchased)	4,000.00
Radio "Tell Me, Doctor"	23,000.00
National Meeting Expense	1,500.00
1952 Co. Sec'y-P. R. Conf.	3,000.00
Co. Soc. Meetings (Including FFF Nights)	1,500.00
Woman's Auxiliary	600.00
Miscellaneous Expense	1,000.00
TOTAL EXPENSES	$104,840.00
LOSS FOR THE YEAR	13,640.00
Balance from 1951	32,055.98
Balance to 1953	$18,415.98
Balance in P.E. Reserve (bonds)	30,000.00

RHEUMATIC FEVER CONTROL PROGRAM—1952

Income:		
Michigan Heart Association		$15,000.00
Michigan Society for Crippled Children and Adults, Inc.		5,736.40
Total Income:		$20,736.40
Balance from 1951:		26,431.80
TOTAL FUNDS AVAILABLE		$47,168.20
Expenses:		
Central Office Expense:		
Committee Meetings	$	800.00
Equipment & Repairs		400.00
Payroll Taxes		125.00
Postage & Mailing		100.00
Printing		800.00
Office Supplies		100.00
Publications & Pamphlets (Purchased)		100.00
Administrative Salaries		8,800.00
Office Salaries		1,000.00
Travel		1,600.00
Fellowships		3,000.00
Special Equipment		3,800.00
Furniture & Fixtures (For New Centers)		1,500.00
Reserve for Contingencies		10,000.00
Miscellaneous Expense		100.00
Total Central Office Expense		$32,225.00
Control Centers:		
Alpena	$	200.00
Ann Arbor		600.00
Battle Creek		500.00
Bay City		800.00
Benton Harbor		500.00
Detroit		1,000.00
Flint		500.00
Grand Rapids & Muskegon		3,000.00
Kalamazoo		800.00
Lansing		350.00
Petoskey		500.00
Pontiac		1,500.00
Port Huron		500.00
Saginaw		600.00
Sault Ste. Marie		500.00
Traverse City		750.00
Total Expenses—Control Centers		$12,600.00
TOTAL EXPENSES		$44,825.00
BALANCE TO 1953		$ 2,343.20

THE FORMULA WORKS

(Continued from Page 350)

ment by your government's own words. On occasions, those words can reflect the thinking of only a small group, a minority, or special interest lobby. To "know your government," any group with a bill of goods to sell, or a wrong to be redressed, must depend on its own efforts. No group is equipped by nature to be more influential in this respect than the medical profession. Numerically and economically it is strong. But as the Reverend Reeves said, the doctor's influence on the community is far out of proportion to his numbers. His advice is respected, his counsel is sought. He can maintain that position of eminence only as long as he behaves in a manner to warrant it. Medical societies must be quick and public to expel unworthy members from their membership. Doctors must accept the responsibilities as well as the blessings that come with freedom from government control. That, in essence, *is* the Formula for Freedom . . . although it was Jimmy Durante who had another definition of freedom. He said: "Don't put no constrictions on da people, just leave 'em ta hell alone."

THIRD MICHIGAN INDUSTRIAL HEALTH DAY

May 7, 1952

Hurley Hospital, Flint, Michigan

Registration—9:30 A.M.

Morning Session—10:00 A.M.

OTTO PRESTON, M.D., Flint, Moderator, President, Michigan Association of Industrial Physicians and Surgeons.

1. Welcome—W. W. STEVENSON, M.D., Flint, President, Genesee County Medical Society.
2. Management of Traumatic Neurosis—JOSEPH SHAPIRO, M.D., Flint.
3. Skin Coverage of the Hand—H. W. WOUGHTER, M.D., Flint.
4. Film—"Your Ear and Noise." The Use of the Audiometer In Industry—W. Z. RUNDLES, M.D., Flint.

Luncheon—1:00 P.M.

Afternoon Session—2:00 P.M.

OTTO PRESTON, M.D., Moderator.

1. Venous Stasis of the Lower Extremities—E. A. OSIUS, M.D., Detroit.
2. Review of Abnormal Chest Films Which Do Not Preclude Gainful Employment—R. M. ENGELMAN, M.D.
3. The Romance of Trauma—G. J. CURRY, M.D., Flint, Chairman of the Michigan Committee on Trauma of the American College of Surgeons.
4. Present Status of Industrial Medical Education—Speaker to be announced.

Business Session—4:30 P.M.

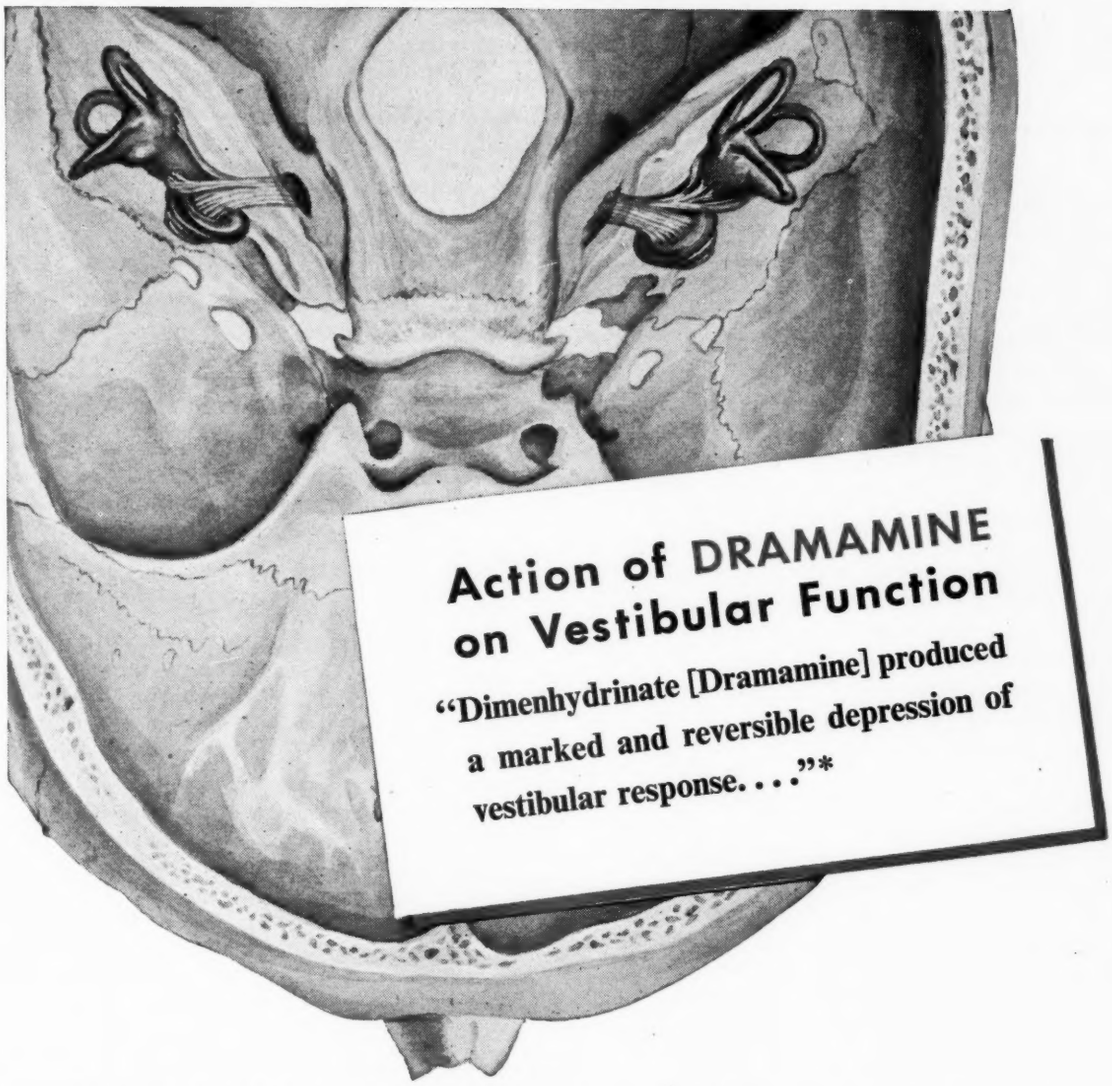
Annual Business Meeting, Michigan Association of Industrial Physicians and Surgeons.

Cocktail Hour—6:30 P.M.—Hotel Durant

Dinner—7:30 P.M.

MAX R. BURNELL, M.D., Detroit, Toastmaster.

"Recent Advances in Artificial Respiration."—A. C. IVY, M.D., Chicago, Professor of Physiology, University of Chicago, Vice-president University of Illinois.


Action of DRAMAMINE
on Vestibular Function
"Dimenhydrinate [Dramamine] produced
a marked and reversible depression of
vestibular response. . . ."*

In a study of the action of Dramamine on vestibular function, Gutner and his associates found that Dramamine "significantly delayed the onset of nystagmus, shortened the duration of nystagmus and increased the milliamperage necessary to effect tilting."

The great effectiveness of Dramamine in motion sickness, they state, ". . . is probably related primarily to its ability to depress vestibular function. . . ."

DRAMAMINE®

BRAND OF DIMENHYDRINATE

—for prevention and treatment of motion sickness—

Now available in these dosage forms: { Tablets – 50 mg. / Liquid – 12 mg. per 4 cc. / Average dose – 50 mg.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

*Gutner, L. B.; Gould, W. J., and Batterman, R. D.: Action of Dimenhydrinate (Dramamine) and Other Drugs on Vestibular Function, Arch. Otolaryng. *53*:308 (March) 1951.

RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

Nearly all the directors of Michigan's full-time local health departments gathered in Lansing, February 6, 7 and 8 at the invitation of the state health commissioner to make their recommendations for future conduct of state and local health department programs. This Third Annual Commissioner's Conference of Local Health Officers resulted in 58 recommendations.

The health officers recommended that local health departments assume responsibility for interesting young people in their communities in the career opportunities in public health; that the state health department and local health departments make every effort to promote fluoridation of public water supplies; that approved sanatoria in the state provide periodic progress reports on all tuberculosis patients under their care to the health officers from whose jurisdiction they come.

They recommended, too, that the state health commissioner delegate responsibility wherever practicable to local health departments to carry out the maternity hospital licensing program; that the state health department furnish information relative to: (1) recognized immunization practices for different age levels against smallpox, diphtheria, whooping cough and tetanus and (2) the minimum standards for immunization status for adequate community protection.

They recommended that the commissioner of health ask the Michigan State Medical Society and the Michigan Medical Service to include provision for immunization among their services; and that the Maternal and Child Health Committee of the Michigan State Medical Society be asked to develop a plan for providing obstetrical consultation services to practitioners in areas where there are no specialists available in this field.

The local health directors favored the development of local health departments in those counties not now covered and they endorsed the principle of regrouping existing health departments to service a larger population unit. They also favored a general public health appropriation of federal funds rather than categorical grants; and the establishment of local health councils.

They endorsed the idea of having an annual Commissioner's Conference.

They were informed that Social Security benefits could be made available to all full-time employes of local health departments by proper action of their local boards of supervisors or by their district boards of health.

These and the other recommendations to the Commissioner have been submitted to all full-time local health officers and to the Division Directors of the State Health Department for consideration and application in the health programs of the state.

* * *

Results of a recent survey of birth registrations in Michigan are now being studied on a county-to-county basis to find out where and why births are not being registered and to take positive action toward securing 100 per cent registration.

The state-wide survey showed that one out of every hundred babies born in Michigan does not have a birth record filed with the Michigan Department of Health. The exact figures show that 98.7 per cent of Michigan births were registered in 1950, which is an improvement over 1940 when a similar survey disclosed a registration of 97.8 per cent.

Twenty-six states and the Territory of Hawaii had better registration records than Michigan.

The study of Michigan birth registrations was part of a nationwide survey conducted by the United States Public Health Service, state health departments and the Bureau of the Census.

* * *

A new film catalog issued by the Department describes 209 films, eighty-seven film strips and seven slide sets now available for loan throughout the state. Approximately 500 prints on forty-five health subjects are in constant use during the year. Last year, 741,085 persons saw films from the Department's loan library in 10,460 showings. Some of the films are designed specifically for professional audiences—physicians and nurses. Most are for the average club or school use.

* * *

Fluoridation of water supplies as a means of preventing tooth decay in children continues to gain in popularity throughout the state. Twenty-one cities are now fluoridating their water supplies. A dozen others have plans approved and are awaiting the installation of equipment or delivery of chemicals. At least thirty other communities are in the investigating and planning stage.

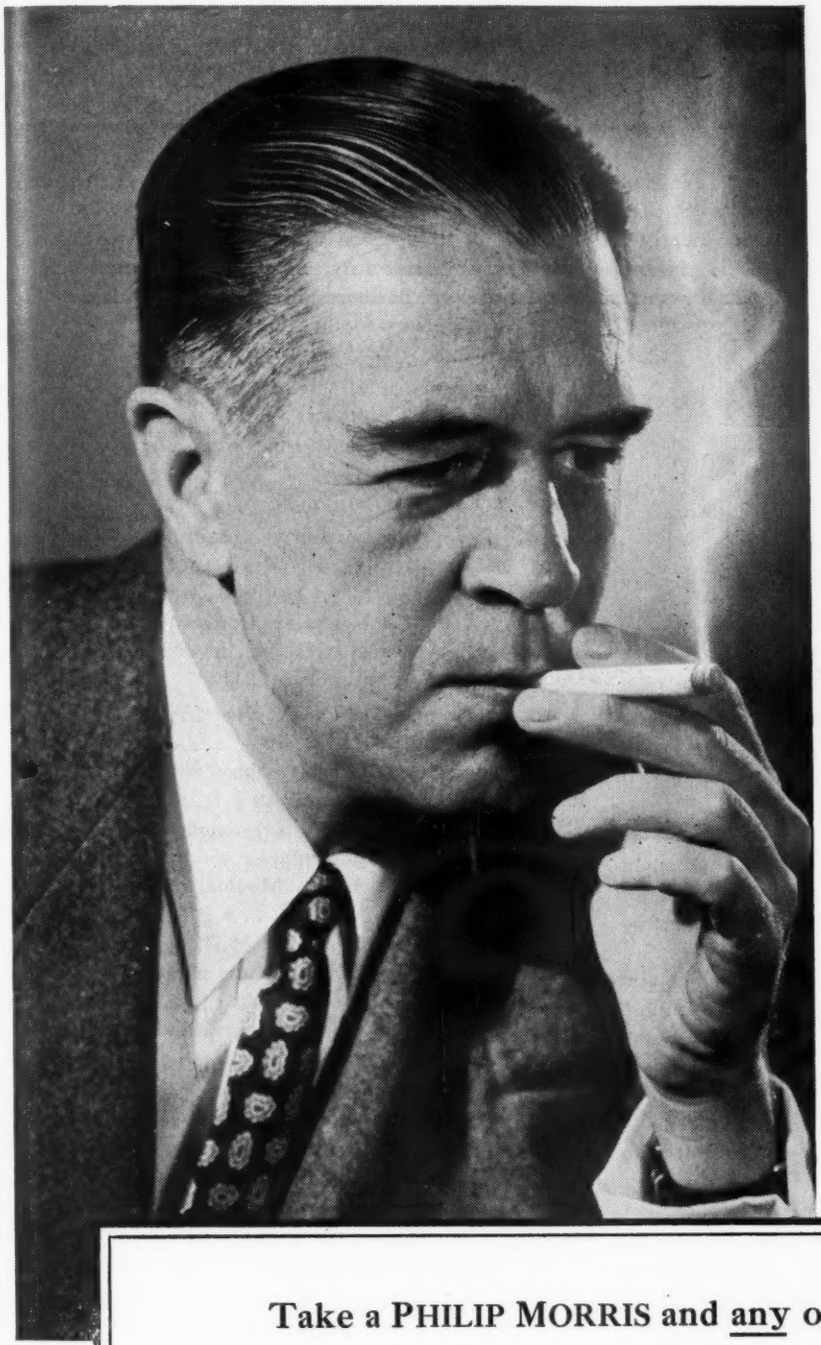
* * *

A new film, "Uterine Cancer: The Problem of Early Diagnosis," can be borrowed from the film loan library of the Michigan Department of Health. The film, jointly sponsored by the American Cancer Society and the National Cancer Institute, shows how deaths from cancer of the uterus can be drastically reduced through adherence in general office practice to the routine pelvic examination of all adult women.

The film is for professional audiences—medical societies, medical schools, hospital staffs and physicians' or nurses' groups. It is a 16 mm. sound film, in color, with a running time of 21 minutes and is rich in clinical and laboratory material.

* * *

Interest in the problems of the later years is at a high level in Michigan as evidenced by more than 1,000 requests for the November issue of the Department's magazine which dealt with this subject. For the first time in the history of its monthly bulletin, dating back to 1898, the Department had to resort to multilithing an issue to meet the requests that could not be filled by the printed edition.



Doctor, be your own judge... try this simple test

With so many claims made in cigarette advertising, you, Doctor, no doubt prefer to judge for yourself. So won't you make this simple test?

Take a PHILIP MORRIS and <u>any</u> other cigarette

1. Light up either one first. Take a puff—get a good mouthful of smoke —and s-l-o-w-l-y let the smoke come *directly* through your nose.
2. Now, do exactly the same thing with the other cigarette.

You will notice a distinct difference between PHILIP MORRIS and <u>any</u> other leading brand.

PHILIP MORRIS

Philip Morris & Co. Ltd., Inc., 100 Park Avenue, New York 17, N. Y.

In Memoriam

ANDREW S. BRUNK, M.D., Detroit, Past President and the Treasurer of the Michigan State Medical Society, who was active in medical organizations for nearly a quarter of a century, died February 3, 1952, in San Antonio, Texas. He was sixty-seven.

His twenty-four years of continuous service to medicine was milestoned by the contribution of his talents and energy in aiding the founding of several organizations of lasting value to the medical profession.

One of these organizations in which his influence and zealous action was felt was the Michigan Health Council. Working with others who recognized the need for such an organization in Michigan, he assisted in the founding of this Council in 1943. Doctor Brunk was elected its first president and served in that capacity until 1950. After leaving the president's chair, he continued to serve on the Health Council's Board of Trustees and its Executive Committee.

Another organization which received Dr. Brunk's active support at its founding was Michigan Medical Service. Doctor Brunk was a member of the Blue Shield Board of Directors from 1940 until his death.

The third association founded through the pioneering activities of Doctor Brunk was the Conference of Presidents and Other Officers of State Medical Associations. This organization resulted from a gathering of seventeen State Medical Society presidents who came to Detroit in April, 1945, at the telephonic invitation of MSMS President Brunk. The Conference was created in Chicago in December of that year, and Doctor Brunk was elected as its first president.

As one of the founders and strong financial supporters of the Michigan Foundation for Medical and Health Education, Inc., he contributed to the future of medical and health education in this state.

Doctor Brunk began his years of service as an official in organized medical circles by becoming president of the militant East Side Medical Society of Detroit just one year prior to his election as president of the Wayne County Medical Society in 1929. He was instrumental in revitalizing his County Medical Society and was influential in its decision to employ the services of a full-time executive secretary. After his presidential tenure, he also served on the Board of Trustees of the Wayne County Medical Society for five years.

From 1930 to 1952 Doctor Brunk was a member of The Council of the Michigan State Medical Society; and of its Executive Committee from 1939 to 1945. He was elected MSMS President and served the 1944-45 term. Following a successful year, he was chosen as MSMS Treasurer, which position he held until his death.

Besides these positions of responsibility in the medical societies, Doctor Brunk was also a member of the Board of Directors of Michigan Hospital Service (Blue Cross) and served on its Executive Committee from 1939 to 1948. He was Director of Martin Place Hospital, Detroit, which he established in 1930.

Among the many honors received by Doctor Brunk was Honorary Membership in the Colorado State Medical Society conferred in 1951 for his "services to the whole medical profession of the United States." Also in 1951, Michigan Medical Service presented him with a desk clock in commemoration of over ten continuous years of service on the Michigan Medical Service Board of Directors.

Doctor Brunk received his M.D. degree from Ohio State University in 1909. He was chief surgeon for the Southern Pacific Railroad in LaJunta, Colorado, from 1911 until he came to Detroit in 1924.

He is survived by a son, Perry E. Brunk, D.D.S., of Dearborn; three brothers, Clifford F. Brunk, M.D., Traverse City, Dr. Henry Brunk of Detroit, and Lloyd Brunk of Indian River; two sisters, Mrs. D. E. Stutzman of Lima, Ohio, and Mrs. O. G. Brenneman of La-Fountain, Indiana.

In a eulogy to Doctor Brunk, a friend said:

"Doctor Brunk had numerous hobbies—one never understood where he found the time to devote himself to so many of them. He was a natural mechanic and upon his retirement eighteen months ago, Doctor Brunk kept himself busy with the development of labor-saving devices that made his home in Riverside, Ontario, a surprising experience to his many guests. He was the 'Henry Ford' of the Detroit medical profession, devising useful gadgets about his hospital, home and farm estate that contributed to his own and his many friends' conveniences and pleasure.

"Doctor Brunk was a quiet man, but his calm and unruffled manner generated confidence; his leadership was sought everywhere. He had deep humor and was 'good company'—a good listener who drew out the best in friend and acquaintance. In his gentle way, he urged all to greater effort and was constant in inviting the good qualities of those about him to all others in his vast acquaintance.

"Doctor Brunk was a good friend. His friends will miss him; his medical associations will miss him; and good medicine in Michigan and throughout the United States will miss him. It was good that he lived."

EARL J. FLICK, M.D., of Royal Oak, died January 24, 1952, at the age of forty-one.

Dr. Flick, originally from Pennsylvania, was graduated from the Wayne University College of Medicine in 1936. He practiced in Royal Oak with his brother, John R. Flick, M.D.

He is survived by his wife, Beth; four children, Janet, Susan, Gwendolyn and Earl, Jr.; and two brothers, Clair and Dr. John.

WILLIAM VERNE McINTOSH, M.D., of Highland Park, died January 1, 1952, at the age of sixty-one.

For the past twenty-three years, Dr. McIntosh was physician to the Highland Park Schools. He began his practice in Highland Park in 1916.

Dr. McIntosh was graduated from the Toronto College of Medicine in 1914. He served his internship at Harper Hospital, Detroit. He was a past president of the staff of Highland Park General Hospital and a member of the Wayne County Medical Society.

During World War I he served with the Canadian Army Medical Corps.

He is survived by his wife, Zella; a son, Donald; and his mother, Mrs. Margaret McIntosh.

WILLARD MONFORT, M.D., of Highland Park, died December 30, 1951, at the age of seventy-eight.

For the past thirty-nine years, he has served the community of Highland Park, limiting his practice to eye, ear, nose and throat. Previous to that, Dr. Monfort practiced medicine in Ithica, Michigan, for twelve years. He was graduated from the New York University College of Medicine in 1899.

Dr. Monfort was a member of the Wayne County Medical Society, the Detroit Otolaryngological Society and the Detroit Ophthalmological Society. He was elected an Emeritus member of the Michigan State Medical Society as well as a member of its "Fifty Year Club" in 1949.

He is survived by his two sons, Robert Monfort, M.D., of East Lansing, and Neal Monfort; two brothers, George and Frank; two sisters, Edith May, of Lapeer, and Mrs. Peter LaCamara; and four grandchildren.

F. GERALD RANSOM, M.D., of Jackson, died December 31, 1951, at the age of fifty-one while making a house call on a patient.

He was a graduate of the University of Michigan Medical School in 1923.

Dr. Ransom practiced medicine for twenty-five years and was a former treasurer of the Jackson County Medical Society. He was also a member of the staffs of the Foote and Mercy Hospitals.

He is survived by his mother, Mrs. Fred C. Ransom, of Jackson, and his brother, Henry K. Ransom, M.D., Associate Professor of Surgery at the University of Michigan.

LEON E. SEVEY, M.D., of Grand Rapids, died December 26, 1951, at the age of sixty.

For the past thirty-six years he served the community of Grand Rapids as a surgeon. He was graduated from

MEDCOTRON STIMULATOR MODEL 50

For the stimulation of innervated muscle or muscle groups . . . In rehabilitation therapy, ancillary to treatment by massage . . .

The Medcotron Stimulator, Model 50, operates on 110 volt, 50 to 60 cycle alternating current. The current generated by the apparatus is non-sinusoidal alternating current. Output circuits have no direct connection to the power supply. The maximum voltage output is from 15 to 18 volts R.M.S. The protective mechanism consists of a 1 amp. line fuse that will open, should a short circuit ever occur.

By means of the Medcotron Pad Electrodes the current from the Stimulator is applied to individual muscles or groups of muscles, with comparative freedom of discomfort to the patient. Control of stimulation is attained by the operator regulating the type of stimulus provided, and the voltage and frequency of the current.

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Detroit 1, Michigan

the University of Pittsburgh School of Medicine in 1913.

After graduation, Dr. Sevey interned at Mercy Hospital in Pittsburgh before he moved to Grand Rapids and became associated in 1915 with the late Richard Smith, M.D.

Dr. Sevey was a past president of the Kent County Medical Society and of the Michigan Association of Industrial Physicians and Surgeons. He was also a member of the Phi Rho Sigma medical fraternity.

Dr. Sevey was a member of the consulting surgical staffs at Blodgett Memorial and St. Mary's Hospitals and also at Butterworth Hospital. He was honored last spring by the Industrial Surgeons group for long service.

During World War I, Dr. Sevey served in Army Hospital Unit "Q" in the United States, England, and France as a captain.

He is survived by his wife, Lillian May, and his mother, Mrs. Rose Sevey, of Grand Rapids.

J. HOWARD VanNESS, M.D., of Allegan, died December 20, 1951, at the age of seventy-nine.

He served the community of Allegan for forty years before his retirement a few years ago. He was graduated from the University of Illinois Medical College in 1906.

He was first president of the Allegan Rotary Club and past president of the Kalamazoo Academy of Medicine.

He is survived by his wife, Betty; a daughter, Mrs. Stuart Geldholf, of Grand Rapids; two sons, George, of Constantine, and Sidney, of Middlesboro, Kentucky, two stepsons, George Maents, of Kalamazoo, and James Maentz, of Grand Rapids; seven grandchildren and two great grandchildren.

GEORGE F. WARD, M.D., of Detroit, died December 9, 1951, at the age of sixty-seven.

Dr. Ward practiced medicine in Detroit for thirty-three years. He was graduated from the Syracuse University College of Medicine in 1913.

Dr. Ward is survived by his wife, Evangeline; a brother, William; and a sister, Nell Ward, M.D.

HERBERT H. WILEY, M.D., of Utica and Algonac, died January 20, 1952, at the age of seventy-eight.

He practiced medicine in the community of Utica after his graduation from the Detroit College of Medicine in 1899 until his retirement six years ago.

Dr. Wiley was active in community affairs and served as a member of the Utica Board of Education for thirty years. Last September Dr. Wiley was elected a Life Member of the Michigan State Medical Society as well as being named to the MSMS "Fifty Year Club."

Dr. Wiley is survived by his wife, Ethel; two brothers, Arthur, of Blenheim and Edd, of Windsor, Ontario. He also leaves his nephew, D. Bruce Wiley, M.D., of Utica, MSMS Councilor of the Fifth District.

Say you saw it in the Journal of the Michigan State Medical Society

Legal Opinions

TWO LEGAL OPINIONS ON STERILIZATION

W. J. Burns, Executive Director
Michigan State Medical Society
Lansing, Michigan

Dear Mr. Burns:

Reference is had to the inquiry of July 24, 1951, concerning certain aspects of sterilization and containing eight specific questions.

I assume that the sterilization referred to is not the compulsory or statutory sterilization of mental defectives, but has reference to what might be termed voluntary sterilization. In this State, we have no statutes concerning voluntary sterilization bearing on the criminal or civil liability in connection therewith. Nor are there any reported decisions in this State bearing on the common law liability in relation thereto. In attempting to answer the specific questions, therefore, one is obliged to reply on general legal concepts and reasoning with some regard to the very few decisions reported in other jurisdictions. Nobody can safely predict a new decision of the Supreme Court, particularly when there are no guideposts of former decisions in this State.

Voluntary sterilization may be placed in three categories. The first, one may call eugenic sterilization. This is the type where one desires to be sterilized because he believes he has some serious defect and thinks there is a possibility it will be transmitted to the offspring. The second, one might call the therapeutic sterilization which is sterilization for medical reasons involving the health of the individual. The third may be termed contraceptive sterilization, which is from choice of the person sterilized and for his convenience or economic reasons.

From such research as I have made, it is my belief that as the law now stands in this State, it is most unlikely that there is any criminal or civil liability for the performance of voluntary sterilization if proper consent of necessary parties has been obtained and the operation is not negligently performed.

Answers to specific questions follow:

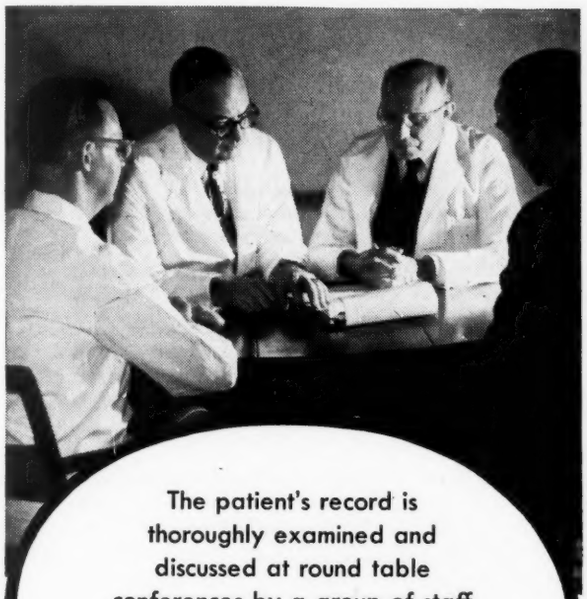
1. Is it necessary for the wife to sign when sterilizing the husband? For proper protection, the wife's written consent should be obtained.

2. Is it necessary for the husband to sign when sterilizing the wife? For proper protection, the husband's written consent should be obtained. In other words, both spouses should sign consents for the sterilization of either.

3. What is the physician's legal responsibility when sterilization is not specified in each sex? (i.e. before operation.) This question is not clear and I am not sure that I understand it.

4. What are the responsibilities relative to sterilizing people who are questionably mentally incompetent? Is the signature valid? A mentally incompetent person cannot in the eyes of the law give consent. The law in this regard is no different than that involving any contracts of incompetents. If it can be shown that at the time when a person entered into a contract he was incompetent, the contract is void. This question most commonly arises in the matter of making wills. If a physician has doubt about a person's mental competency, he should not rely on the consent given by such person. A person declared incompetent by a court may have his consent given by a properly appointed guardian.

5. What are the legal responsibilities for sterilization decided upon after anesthesia is given? In other words, without the patient's permission but when it is believed to be for the best interest of the patient. It is not safe to sterilize the patient without his consent. The form of written consent required to be signed by patients



The patient's record is thoroughly examined and discussed at round table conferences by a group of staff members which includes at least two physicians and one counselor.

Successful Management OF THE
PROBLEM DRINKER

The alcoholic, like the hypertensive or the diabetic, is an ailing man. He presents a medical problem.

For this reason the program of management at The Keeley Institute is based on sound medical principles developed through the years.

The treatment approach is positive rather than negative—encouragement rather than restraint; nutritional build-up rather than nauseants or alcohol reactors; happy surroundings rather than confinement—and the results have shown this to be a successful course to follow.

This introduces a series in which we intend to describe the various phases of treatment from the patient's arrival at The Keeley Institute to his ultimate departure therefrom.

Full information, including rates, will be furnished to physicians on request.

THE KEELEY INSTITUTE
DWIGHT, ILLINOIS

Therapy for Vascular Headache to Reverse the Physiologic Disturbance

Headache, a problem encountered in all kinds of medical practice, may occur in association with any of a variety of disorders, some organic, other purely functional.

Among the several types, functional headaches present the greatest problem because of their obscure etiology and recurrent nature.

Among these are:

Migraine (both classical and variant forms)
Tension headache
Psychogenic headache
Histaminic cephalgia

Wolff and his co-workers established that the pain of these headaches is due to disturbance of the tonus of cranial blood vessels — hence the term *vascular headaches.*

The craniovascular changes associated with the several phases of the typical migraine attack are:

Vasoconstriction **— to which the visual prodromata are attributable. It is possible to abort the attack during this phase in all but a few cases. (See treatment below.)**

Vasodilatation **— as the vessels lose their tone, exaggerated pulsations set in, resulting in the throbbing pain which characterizes vascular headache. Treatment for the attack is still effective during this phase. (See below.)**

Vessel Edema **— if the vasodilation continues for too long, vessel walls become edematous; this changes the character of the pain to a steady, intense aching. The attack can now no longer be checked, even with maximum dosage of specific drugs. *Moreover, sustained headache often induces reflex neck muscle tension, a source of residual pain.***

Therapy: 1. Reduce the frequency of attacks — psychotherapy and regulation of living habits to avoid fatigue and nervous tension.

2. Relieve the acute attack — of the numerous drugs which have been tried, ergotamine and its derivative preparations have proved most effective. The newest product is oral tablets of Cafergot®, N. N. R. (ergotamine with caffeine 'Sandoz'). When dosage is adjusted to the needs of the individual, Cafergot will give good relief in 85% of cases. It enables a greater number of patients to benefit from early administration since the oral route simplifies treatment as compared to parenteral therapy.

The dosage procedure is:

1. Take 2 tablets at first sign of the attack.
2. If attack continues, take one additional tablet every ½ hour until attack is terminated *(max. 6 tabs. per attack).*

Many migraine patients delay taking medication until the attack is at its height. Explicit dosage instructions may be forgotten unless the patient comes to realize their importance. Therefore, to encourage adherence to correct procedure, we have prepared pads outlining detailed dosage instructions. Supplies of these INSTRUCTION SLIPS will gladly be sent upon request.

GENERAL REFERENCES: DeJong, R.: Chicago M. Soc. Bull 54: 106, 1951. Friedman, A.: Modern Headache Therapy, St. Louis, C. V. Mosby Co., 1951. Wolff, H.: Headache and Other Head Pain, N. Y., Oxford Univ. Press, 1948.

Sandoz Pharmaceuticals

DIVISION OF SANDOZ CHEMICAL WORKS, INC.
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in some of the larger hospitals is sufficiently broad to permit sterilization after anesthesia, should it become medically necessary.

6. What are the legal responsibilities or ethics associated with consultation? To my knowledge, there are no specific precepts established by the AMA concerning sterilization and consultations in relation thereto. Presumably, where there is a question as to the medical necessity for therapeutic sterilization, the physician would find it appropriate to take consultation. The consultations required by law in cases of therapeutic abortions have no application to sterilization.

7. Does the State Association have any ethical codes relative to ages, number of children, et cetera, which may be used in deciding on advisability of sterilization? No.

8. What are the hospital's legal responsibilities in regard to sterilization? If the consent indicates the hospital in which the operation is to take place, the hospital would be certainly no more liable than the surgeon.

Very truly yours,

J. JOSEPH HERBERT
Legal Counsel
Michigan State Medical Society

August 14, 1951

Wm. J. Burns, Executive Director
Michigan State Medical Society
Lansing, Michigan.

Dear Mr. Burns:

Under date of January 29, 1952, you have made inquiry as to whether the Supreme Court of our state has recently ruled on the constitutionality of the Michigan statute concerned with sterilization of mentally defectives. Your request is based on a letter from the Medical Society of the State of North Carolina, dated January 24, 1952.

The only Michigan statute concerned with this subject, now effective, is Act 281, P.A. 1929 (C.L. 1948, Secs. 720.301-720.310). This statute is an Act to prevent the procreation of feeble-minded, insane, and epileptic persons, moral degenerates, and sexual perverts; to authorize and provide for the sterilization of such persons and payment of the expenses thereof.

There has been no case passing on the constitutionality of this statute. However, a similar statute which was repealed by the current one was Act 285, P.A. 1923. A portion of the 1923 statute was, in 1925, declared unconstitutional in the case of *Smith v. Probate Judge, 231 Mich. 409*. The portion declared unconstitutional, being Section 7, subdivision 2, of the 1923 Act, provided for the sterilization only of those feeble-minded persons who are unable to support any children they might have, and whose children probably would become public charges. The court held that the invalidity of this particular section did not affect the constitutionality of the balance of the law. Inasmuch as the current statute is, in wording, substantially the same as the 1923 Act, omitting therefrom, however, the invalid provisions, it may be said that the Smith case confirmed the constitutionality of the current Act by analogy.

The only other decision bearing on the constitutionality of the 1923 Act is the case of *In re Salloum, 236 Mich. 478*. This was, in effect, a memorandum decision referring to the Smith case, supra, which had been decided the year before.

I am unable to find any later decisions bearing on the constitutionality of the 1923 or 1929 Acts, and I am of the opinion that there are none.

Very truly yours,

J. JOSEPH HERBERT
Legal Counsel
Michigan State Medical Society

February 6, 1952.

Say you saw it in the Journal of the Michigan State Medical Society

Correspondence

Otto O. Beck, M.D., President
Michigan State Medical Society
Lansing, Michigan

My Dear Doctor Beck:

We look forward with very real pleasure to reading the March 1952 Civil Defense and atomic warfare issue of THE JOURNAL of the Michigan State Medical Society.

Your previous Civil Defense issue was a worthy symposium, far in advance of most such materials. The March 1951 issue was and is still being read with considerable interest by Civil Defense workers. The authors, the editor and the Committee on Atomic and Allied Procedures certainly are to be commended.

We anticipate reading the March 1952 issue with equal enlightenment. Can you send me 12 copies for our reference use?

Very truly yours,

LESTER J. MAITLAND
State Director
Michigan Office of Civil Defense
Lansing, Michigan

February 11, 1952

Mr. Wm. J. Burns, Executive Director,
Michigan State Medical Society,
Lansing, Michigan

Dear Bill:

I thought you would be interested to know that we now have a doctor for next summer for Kalkaska—one of the fellows who finished at Wayne last summer. He is a splendid young fellow who was in the upper third of his class, and both he and his wife are going to fit in beautifully. Kalkaska now is one of our bare spots, having only two old men, both of them crippled and unable to make house calls.

They are letting out bids in March for the health center. The plans for the Center, plus the welcome the town folks gave them, are what decided the Kittis. Since their plans were in direct relationship to the State Society's activities in interesting students in rural areas, plus the Society's co-operation in working out plans for the Health Center, I thought at the State Office level you would be interested to know that as far as Kalkaska is concerned, we have had a good experience.

Sincerely,

JOHN R. RODGER, M.D.,
Bellaire, Michigan

January 30, 1952

Mr. William J. Burns,
Executive Director,
Michigan State Medical Society

Dear Sir:

I wish to bring to your attention the extreme need of the Air Force Reserve for all classes of medical personnel, such as doctors, dentists, nurses, sanitary engineers and hospital technicians in the Medical Group of the 929th Reserve Training Wing.

The 439th Troop Carrier Wing, an Air Force Reserve unit which was trained by the 2242D Air Force Reserve Training Center, Selfridge Air Force Base, was called into active Federal service on April 1, 1951, so again we have the task of building another Reserve Training Wing. To date, the Medical Group of the 929th Reserve Training Wing is far behind in reaching its goal. The Medical Group is authorized 26 officers and 67 airmen. Colonel Richard D. Mudd, a well-known doctor and Air Force Reservist of Saginaw, Michigan, is the Air Surgeon in command of the Reserve Medical Group.

This unit needs the following medical officers and technicians: doctors (M.D.'s) 5, dentists 2, nurses 10, sanitary engineer 1, dietician 1, administrative officers 2, meat and dairy inspector 1, plus a number of medical, dental, and laboratory technicians.

The training consists of one week end a month (2 days) for which one will receive four (4) days' pay, points toward retention in the Air Force Reserve, and at the completion of twenty years service one can retire with an income for life upon reaching age 60.

Anyone, especially doctors, who is interested is invited to write to the Commanding Officer, 2242D Air Force Reserve Training Center, Selfridge Air Force Base, Michigan, or contact Dr. Richard D. Mudd at 1001 Hoyt Street, Saginaw, Michigan, either in person or by letter.

The active Air Force Reserve has become a vital element in our national defense, and its maintenance is the responsibility of all our citizens. The Air Force organized Reserve is a vast voluntary organization without which our Air Force would suffer greatly. As in the past, it is hoped that the medical profession will continue to support the Reserves.

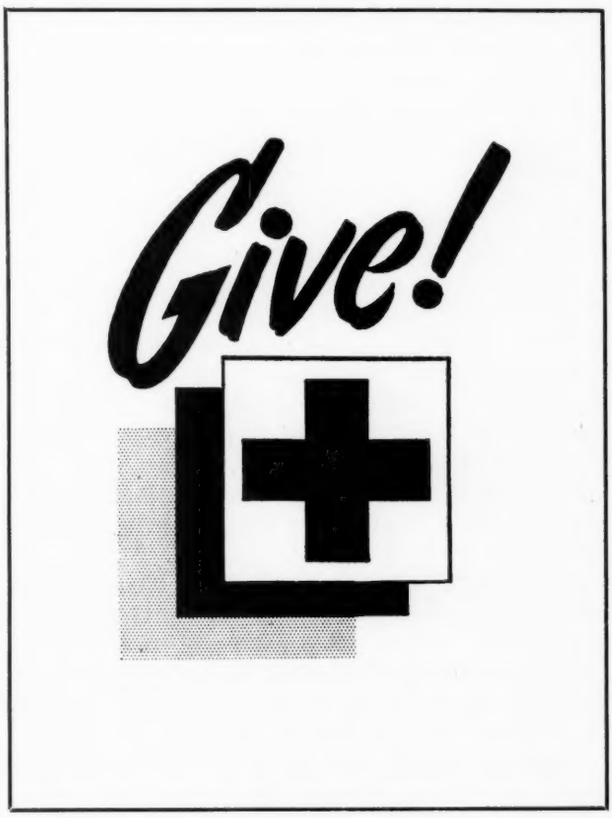
Your interest in this program, which is for our national security, will be greatly appreciated.

I assure you that all inquries will receive prompt and courteous attention by this headquarters.

Sincerely yours,

GEORGE L. ROSS
Lt Col, USAF
Commanding
Selfridge Air Force Base,
Michigan

18 January 1952



. . . . . NEWS MEDICAL

MICHIGAN AUTHORS

Frederick A. Coller, M.D., of Ann Arbor, is the author of an article entitled "Some Effects of Physiological Research Upon Surgical Practice," published in the *University of Michigan Medical Bulletin,* December, 1951.

G. G. Bole, Jr., M.D., B. L. Baker, M.D., D. J. Ingle, M.D., and C. H. Li, M.D., of Ann Arbor, are authors of an article entitled "The Effect of Hypophyseal Hormones on the Lipid Content of Brown Adipose Tissue," published in the *University of Michigan Medical Bulletin,* December, 1951.

John Woodworth Henderson, M.D., Ph.D., and Elizabeth Caroline Crosby, Ph.D., of Ann Arbor, are authors of an article entitled "An Experimental Study of Optokinetic Responses," published in the *Archives of Ophthalmology,* January, 1952.

Richard Coy Schneider, M.D., and John Woodworth Henderson, M.D., of Ann Arbor, are authors of an article entitled "Penetrating Orbital Wound with Intracranial Complications," published in the *Archives of Ophthalmology,* January, 1952.

C. P. Hodgkinson, M.D., of Detroit, is the author of an article entitled "Hemorrhage From Ruptured Utero-Ovarian Veins During Pregnancy," published in *The Journal of the American Medical Association,* January 26, 1952.

Louis J. Gariepy, M.D., O. A. Capano, M.D., and Lawrence W. Gardner, M.D., of Detroit, are authors of a paper, "Non-Traumatic Rupture of the Common Bile Duct," in *The American Journal of Surgery,* March, 1951.

Seymour K. Wilhelm, M.D., of Detroit, is the author of a paper, "Alterations in Serum Potassium and Sodium in Acute Myocardial Infarction," published in *The American Journal of Clinical Pathology,* February, 1951.

Howard K. Gray, M.D., James D. Frylogle, M.D., and C. Allen Good, M.D., are authors of a paper, "Malignant Pulmonary Abscess," published in *The Surgical Clinics of North America,* August, 1951.

E. Stewart Ryerson, M.D., and Ralph A. Poirier, M.D., of Detroit, are the authors of a Manual for the Glaucoma Patient.

Ivan F. Duff, James W. Linman, and Roberta Birch, Department of Internal Medicine, Surgery, Gynecology and Obstetrics, of Ann Arbor, are the authors of an article, "The Administration of Heparin," published in the *University of Michigan Medical Bulletin,* January, 1952.

Russell N. DeJong, M.D., of the Department of Neurology, Ann Arbor, addressed the student body of the Marquette University School of Medicine on October 16, on the subject "Metastatic Involvement of the Central Nervous System."

Russell N. DeJong, M.D., A. Leslie Drew, Jr., and Martha R. Westerberg, M.D., of Ann Arbor, participated in the conducting of the examinations of the American Board of Psychiatry and Neurology in New York City on December 16, 17, and 18. Dr. DeJong is a Director of the American Board of Psychiatry and Neurology.

Russell N. DeJong, M.D., of Ann Arbor, on January 8, addressed the Chicago Neurological Society on the subject, "The Syndrome of Hallervorden and Spatz."

Frederick A. Coller, M.D., of the Department of Surgery, Ann Arbor, gave a paper entitled, "Cancer of the Rectum: A Study of Long Term Survival," at the annual meeting of the Southern Surgical Association at Hot Springs, Virginia, in December.

Carl E. Badgley, M.D., of Ann Arbor, conducted a Crippled Children's Clinic at Bay City on December 4. On December 17, Dr. Badgley gave a paper on "Fractures in and about the Knee Joint" at the meeting of the Boston Orthopedic Society, in Boston.

J. W. Conn, M.D., of the Department of Internal Medicine, of Ann Arbor, took part in the conference on the adrenal cortex called by the National Academy of Sciences, meeting January 17 through 19 at New York City.

J. W. Conn, M.D., of Ann Arbor, gave the annual Sigmund Pollitzer Lecture at New York University Postgraduate Medical School, New York City. His subject was "The Influence of Adrenal Cortical Activity upon the Electrolyte Composition of Thermal Sweat."

Louis J. Gariepy, M.D., is the author of an article, "Your Doctor Leads Freedom's Fight Against Socialism," in the *Michigan Voter,* May-June, 1951.

Conrad R. Lam, M.D., F.A.C.S., Hartley H. Aram, M.D., and Edward R. Munnell, M.D., of Detroit, are the authors of an article, "An Experimental Study of Aortic Valve Homografts," published in *Surgery Gynecology and Obstetrics,* February, 1952.

Robert E. L. Berry, M.D., of Ann Arbor, is the author of an article, "Diagnosis and Treatment of Acute Intestinal Obstruction," published in *The Journal of the American Medical Association,* February 2, 1952.

Ronald Yaw, Superintendent of Blodgett Memorial Hospital, Grand Rapids, is the author of an article, "Are Fire Insurance Rates Too High?" published in *Hospitals,* February, 1952.

Harry Becker, of Detroit AUW-CIO, is the author of an article, "A New Boost for Voluntary Prepaid Care," published in *Hospitals,* February, 1952.

Jacques **H. Ahronheim, M.D.,** Jackson, is the author of a paper on "Mass Blood Typing" which was published in *JAMA* of November 10, 1951. Reprint received by MSMS.

Meyer O. Cantor, M.D., Earle Acker, M.D., Andrew Scharf, M.D., and **Keith Foster, M.D.,** Detroit, collaborated in writing a paper on "Effect of Variation in Length of Decompression Tube Upon Bowel Wall," published in *The American Journal of Surgery,* December, 1951.

Dr. **John J. Grebe,** Research Councilor of Dow Chemical Company and a member of the MSMS Committee on Atomic and Allied Procedures, is the author of an original article, "Atomic Energy as a Force for Peace," which was published in *Think* of December, 1951.

MSMS PAST PRESIDENTS' PHOTOGRAPHS

The Council has taken action to place photographs of all MSMS Past Presidents (from the year 1866 on) in the Past Presidents' Room of the new MSMS "home" at 606 Townsend Street, Lansing.

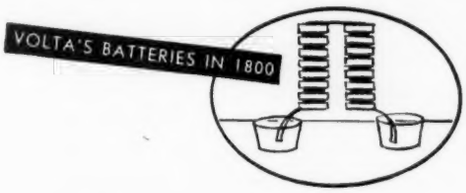
Photographs of the following have not as yet been located:

1867—J. H. Jerome, M.D., Saginaw
1868—Wm. H. DeCamp, M.D., Grand Rapids
1875—Wm. Brodie, M.D., Detroit
1880—J. R. Thomas, M.D., Bay City
1881—J. H. Jerome, M.D., Saginaw
1885—E. P. Christian, M.D., Wyandotte
1886—Charles Shepard, M.D., Grand Rapids
1915—A. W. Hornbogen, M.D., Marquette
1918—Arthur M. Hume, M.D., Owosso
1920—Angus McLean, M.D., Detroit
1921—Wm. J. Kay, M.D., Lapeer
1922—W. T. Dodge, M.D., Big Rapids
1923—Guy L. Connor, M.D., Detroit
1924—C. C. Clancy, M.D., Port Huron
1925—Cyrenus G. Darling, M.D., Ann Arbor

If you have a photograph of any of the above-listed Past Executives of the Michigan State Medical Society, The Council would appreciate your contributing a print for the Past Presidents' Room; or if you know of some person we could contact, please inform the MSMS Executive Office, 606 Townsend Street, Lansing.

Thank You,
The Council,
Michigan State Medical Society

Increasing Socialistic Trend in America Today.—In December AMA's president-elect, Dr. Louis Bauer, threw a challenge to American physicians in his keynote address at the AMA medical public relations conference. Said Dr. Bauer: "This country . . . is fast moving down the road marked Socialism." 1952, a presidential-election year, offers physicians an opportunity to whip socialism at the polls. Every physician, as a citizen, should resolve to become actively engaged in this campaign. The defeat of socialism must be accomplished at the community level because national opinion is the sum total of the public attitude of local communities. According



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to Dr. Bauer, "the tide can be turned in 1952, but we must work together to do it."

* * *

Michigan Medical Service.—The latest figures of members, policy holders of Michigan Medical Service, were for November 30, 1951. There were 2,331,039, of whom 66,377 hold the new $5,000 limit certificate.

Complaints are constantly being heard that the plan is not sufficiently inclusive. The plan was established primarily to care for the catastrophic illness which may strike a family of whatever means, and disrupt that family's finances or security. There was no attempt to cover everything that could occur. Such coverage could be written but would make the plan so expensive the really needy person could not have it. It is hoped that physicians will consider the soundness and stability of the plan when suggesting new features, and that insured members will consider their true security and be willing to pay some of their minor costs in order to afford the cost of the really important risk. How many doctors or patients carry "full coverage" on their automobile or on their house?

As of November 30, 1951, MMS had paid out to doctors $71,545,987.05. In the first eleven months of 1951, $17,352,599.57 was paid to doctors for care of patients, an increase of five million dollars over 1950.

* * *

The Fifth American Congress on Obstetrics and Gynecology will be held in Cincinnati's Netherland-Plaza Hotel, March 31 through April 4. It is sponsored by the American Committee on Maternal Welfare.

Techniques, conclusions and follow-up action in Chicago's recent study of 10,000 neonatal deaths will be revealed for the first time in a symposium on the public health program, chairmanned by Herman N. Bundesen, M.D., president of the Chicago Board of Health. This is the first study to gather enough statistical data for an epidemiologic approach to neonatal mortality.

John Paul Pratt, M.D., Detroit, will moderate the panel discussion on the RH and HR Sensitization. Charles S. Stevenson, M.D., Detroit, will discuss Lueitic Lesions in the Panel on Lesions of the Vulva.

A two-year contest to promote research on the so-called "toxemias of pregnancy" has been announced by the American Committee on Maternal Welfare, Inc.

Dr. Fred L. Adair, president of the Committee, stressed that all theses must be based upon original work done by the authors and must be submitted no later than January 1, 1954. First and second prizes of $500.00 and $250.00, respectively, will be awarded later in 1954 at the Sixth American Committee on Maternal Welfare.

* * *

Honors from the American College of Radiology.—At the annual meeting of the American College of Radiology, on February 8, 1952, in Chicago, the degree of Fellow of the American College of Radiology was conferred—in absentia—upon William G. Belanger, M.D.,

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of Detroit. This degree is conferred on the basis of outstanding contributions and service to radiology.

At a meeting of the Board of Chancellors of the American College of Radiology on February 7, 1952, James E. Lofstrom, M.D., of Detroit, was appointed a Trustee of the American Registry of X-Ray Technicians.

* * *

The Fifth Annual Michigan Rural Health Conference was held in Ann Arbor, at the University of Michigan Rackham Building, January 11 and 12, 1952. It drew its registration from practically every county of the lower peninsula and many of the upper peninsula. It has been judged the most outstanding conference held to date.

Unusual post-conference interest was expressed in the unique feature, "The Court of Public Appraisal," which brought representatives from five major areas of responsibility in health to the stand, to defend their program against the charge: *"Those primarily engaged in carrying out the health programs are failing to make adequate progress in discharging their responsibilities to the public."*

* * *

American National Red Cross, in a fourth anniversary review of its blood program, announces it has collected and turned over to the military forces 1,225,000 pints of blood since the start of the Korean War. Approximately 160,000 pints were shipped to the Far East as whole blood, the rest processed into plasma. During the same period, Red Cross collected and processed 1,861,000 pints for civilian use. Dr. George F. Lull, AMA Secretary and General Manager, renewed the pledge of America's physicians to "do everything possible to make the blood program a continuing success." E. Roland Harriman, Red Cross president, commented on the cooperation received from AMA, American Hospital Association, American Public Health Association and the American Association of Blood Banks. He said: "At every stage . . . we have had the unremitting aid and guidance of the American Medical Association and individual physicians."

Red Cross and the co-operating blood banks will be the collecting agency in a National Blood Program now being set up under direction of a committee headed by Dr. G. D. Cummings. The group, which will report to the Health Resources Advisory Committee in the Office of Defense Mobilization, will co-ordinate all collecting, processing, distributing and research efforts.

Red Cross has set a goal of 300,000 pints per month for military use and 125,000 for civilian, for a total of 425,000. December collections reached 353,000.

* * *

Testifying in favor of the military pay raise bill, Assistant Defense Secretary Anna Rosenberg said the military services currently are able to give medical care to *fewer dependents* than in past years. She gave this as one reason why a pay increase is justified.

Technically, medical care is authorized for dependents *only when professional personnel and facilities are "available."* Mrs. Rosenberg explained that the present situation had developed because of (a) increasing numbers of military personnel who have first claim to medical care, (b) shortages of professional personnel and facilities, par-

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ticularly hospital beds, and (c) the necessity for keeping large numbers of beds ready for Korean casualties.

Also, Mrs. Rosenberg said the military departments' medical budgets were so low as to leave little money to provide care for wives, children and other dependents. For fiscal 1953, she declared, military departments were budgeted at an average of $120 or less for each uniformed member for a year's medical care (Army $107, Navy $120 and Air Force $117). Construction and maintenance costs of hospitals are not included in the totals.

* * *

Atomic Energy Commission, making its semi-annual report to Congress, states that "new knowledge has been gained in the last six months concerning the effects of radiation, and an increasing variety of radioactive substances, on life processes of man, animals and plants." The report summarizes a number of medical research projects under way at AEC's various laboratories and in universities supplied with AEC funds.

* * *

Paid AMA Dues.—In 1951 the members of the Michigan State Medical Society set a new record. Ninety-six per cent of them paid their AMA dues. We doubt if any other state exceeds that record.

* * *

Max K. Newman, M.D., delivered the following addresses: "The Organization of a Department of Physical Medicine and Rehabilitation" at the Midland Hospital, January 17, 1952; "Peripheral Nerve Injuries" at the University of Illinois School of Medicine, for the Chicago Society of Physical Medicine and Rehabilitation, on January 23, 1952.

Dr. Newman has been appointed to the Board of Counselors of the Latin-American Congress of Physical Medicine which met in Panama on February 25-28, 1952.

* * *

The Michigan School for the Deaf will conduct its twelfth annual Parent Institute-Nursery School for the Deaf, March 30 to April 5, 1952, on the campus at Flint.

The program for the parents, consisting of classes, observations, consultations, scheduled tours and lectures, has been planned to assist parents with their child during the preschool years. There is much the parent can do to train their child during these early years and help him to develop habits and patterns which will be important to him throughout his life.

The program for the children is one of attendance at a nursery school to help start them on the road to new experiences in learning.

The key speaker for the twelfth annual institute will be Dr. Helmer R. Myklebust, professor of audiology and director of the Children's Hearing Clinic at Northwestern University. He will climax the Parent Institute-Nursery School program of this year by summarizing many of the points made in his new book, "Your Deaf Child—A Guide for Parents," which parents of hearing-impaired children have found helpful.

Other fine speakers and their topics are as follows:

Bruce R. Siders, superintendent, Michigan School for

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the Deaf—*Aims and Purpose of the Parent Institute-Nursery School.*

Hyman D. Shapiro, M.D., otologist, Lansing—*Causes and Types of Deafness and the Service of the Otologist.*

Courtney D. Osborn, supervisor, Hearing Conservation Program, Michigan Department of Health, Lansing—*Conservation of Hearing.*

Francis E. Lord, Ph.D., director, Horace H. Rackham School of Special Education, Michigan State Normal College, Ypsilanti—*Social Adjustment of the Acoustically Handicapped Child.*

Mary A. Blair, consultant, Division of Special Education, Department of Public Instruction, Lansing—*Language Growth in the Young Deaf Child.*

There will be parent class discussions, special features. No charge.

* * *

Veterans Administration, reporting to Congress on its operations for fiscal 1951, lists approximately two-thirds of its cases as non-service connected and one-third as service connected, or about the present ratio. The period covered is July, 1950, through June, 1951. Data in the tabulation below are from the Veterans Administration report.

Illness	*Service Connected*	*Non-Service Connected*	*Average stay calendar 1950*	*Cost Per Patient Per Day 1951*	*Increase over 1950*
All Patients	35.0%	65.0%	60.8 days	$11.66	7.0%
TB	41.5%	58.5%	205.8 days	13.82	1.5%
Psychosis	51.0%	49.0%	482.1 days	7.22	4.5%
Other NP	24.5%	75.5%	60.3 days	7.22	4.5%
General M & S	12.2%	87.8%	30.8 days	16.47	9.2%

Hospital Entrance Report.—As reported in August, 1951, the Crippled Children Commission has supplied hospitals with extra copies of Form 56R (revised). Each hospital, which serves crippled or afflicted children cases, now can present a copy of the Hospital Entrance Report to the attending physician(s) either before or immediately after the service is rendered. This form gives the Doctor(s) of Medicine all pertinent information, including the patient's insurance coverage.

Such a procedure, made possible through the co-operation of the Crippled Children Commission and the hospitals, will assure the attending physician(s) of prompt receipt of fees—if billed within sixty (60) days after patient's discharge from hospital. The sixty-day billing provision is specifically provided by law.

If your hospital(s) have not developed a method of distributing the third copy (goldenrod) of Form 56R to the attending physician(s) and/or surgeon(s), so they are officially advised that patients are State cases, please contact the chief(s) of staff(s) of your hospital(s) at once. This arrangement took effect November 1.

* * *

Quiz Beneficiaries of Social Security.—We've heard that the Federal Security Agency is planning to place workers in the field to interview beneficiaries of social security and old age assistance.

An eight-page questionnaire has been prepared and these workers will find out, among other things, how often the beneficiary or a member of his family has been ill during the past year, both at home and in the hospital.

The long questionnaire covers many things pertaining to health.

Results of the survey should prove very interesting. It is believed the questionnaire survey was launched for the purpose of preparing propaganda to increase payments to beneficiaries and also to propagandize for the Federal Security Administrator's plan for "free hospitalization" for those over sixty-five.

* * *

AMA Dues.—In answer to several queries, the membership department has clarified a point in connection with the payment of dues by a member who is reinstated.

A member, dropped for nonpayment of membership dues and who wishes to have his membership reinstated, would owe membership dues for the year in which he became delinquent and the year in which his membership was reinstated, but he does NOT have to pay membership dues for the intervening years.

Here is an example: Doctor Blank was dropped in 1951 for nonpayment of 1950 membership dues. He applies for reinstatement of his AMA membership in 1952. To bring about this reinstatement, he would be required to pay his 1950 membership dues and membership dues for 1952. Membership dues for 1951 would NOT be required.

* * *

The new **Journal of the Student** has issued two numbers. It is well presented, on good paper, clearly printed, with plenty of color. It has a page of short spicy editorials, a guest editorial, a two-page news letter, two pages of Washington Wire, four very good scientific articles, five special features, and two other features, the Bucco-Anal Anastomosis, and Local Anesthesia. Many illustrations are used. If this pace is continued, the students bid fair to having a most interesting and stimulating journal.

* * *

A competitive examination for appointment of Medical Officers to the Regular Corps of the United States Public Health Service will be held on June 3, 4, and 5, 1952. Examinations will be held at a number of points throughout the United States, located as centrally as possible in relation to the homes of candidates. Applications must be received *no later than April 30, 1952.*

The Regular Corps is a commissioned officer corps composed of members of various medical and scientific professions, appointed in appropriate categories such as medicine, dentistry, nursing, engineering, pharmacy, et cetera.

* * *

Salary Stabilization Board has ruled that prepayment health and welfare plans approved for contract wage employes by Wage Stabilization Board may be extended to salaried employes without special approval. Federal Register of January 26, 1952, contains complete WSB regulation on health and welfare plans, including list of requirements if plan is to receive automatic approval. —AMA Capital Clinic.

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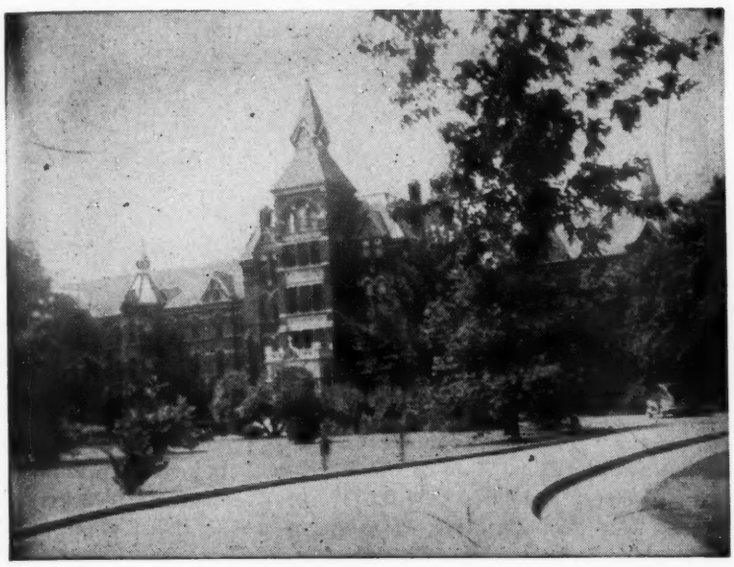

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Wage Stabilization Board Rulings.—Voluntary prepayment medical and hospital care plans should be pleased with recognition they have received from Wage Stabilization Board. Chairman Nathan P. Feinsinger disclosed that Board has decided on policy to be followed in regulating, from standpoint of inflation control, provisions for health benefits granted to wage-earners by their employers.

The wage board voted unanimously to allow employer-paid enrolment in any hospital insurance plan that covers the hospital bill, without prior approval by WSB. Special action would be required only in cases where benefits beyond the usual Blue Cross pattern were proposed. Hospital service plans thus are uninhibited as far as broadening their scope is concerned. It can hardly be called restrictive that semi-private hospital accommodations are prescribed, since this is common in most Blue Cross contracts.

"Importance of WSB's ruling—its rapid approval and translation into official wage-control regulation are a certainty—cannot be overemphasized. Immediate impact on voluntary plans and commercial carriers, economic significance to hospitals and practitioners, influence on pending consideration of health services for servicemen's dependents—these are but a few of the ramifications. Note: Individual who, more than any other, nursed this project through to the end of achieving a decision most favorable to voluntary prepayment plans as well as to the worker was Harry Becker, now on leave from United Auto Workers welfare department to be assistant director of hospital financing study. Now being drafted is a new government form to be executed by employers seeking to cover their workers in health service programs. These forms also must be filled out in cases where out-of-ordinary benefits are proposed and WSB approval is required.—Washington Report on Medical Services, Dec. 17, 1951.

* * *

Leo H. Bartemeier, M.D., Detroit, was recently appointed a member of the Committee on Nervous and Mental Diseases of the American Medical Association.

Committee nominations came from the American Psychiatric Association, the American Psychoanalytical Association and several other organizations and individuals.

The committee is composed of Lauren Smith, M.D., Philadelphia, chairman; Francis M. Forster, Washington; Hugh Carmichael, Chicago; Leo H. Bartemeier, Detroit; Walter H. Baer, Springfield, Ill.; M. Ralph Kaufman, New York, and Maurice Levine, Cincinnati.

* * *

Teachers, Like Doctors, Find FSA Troublesome.—The nation's educators, like the doctors, are finding Mr. Ewing's Federal Security Agency a pain in the neck.

An Indianapolis teacher, Frank Hamilton, who spent a year in Britain as an exchange teacher under the Fulbright Act, has been "warned" because he came home to tell Americans that socialism in England is merely "doctored up communism." Hamilton expressed his views in lectures and newspaper interviews.

"Ewing," said the *Chicago Tribune,* "had one of

his fat boys, J. Harold Goldthorpe, of the FSA office of education, write Hamilton threatening that a continuation of the teacher's expressions would result in cutting off opportunities for Indianapolis teachers to receive Fulbright junkets to Europe."

"When this (FSA) outfit," said the editorial, "arrogates to itself the authority to circumscribe the exercise of free speech, it may well be wondered what liberty of expression it would permit teachers to retain if it ever succeeded in its ambition of obtaining control over the public school system of the United States."

* * *

Progress in Emergency Call Systems.—A report by the AMA Council on Medical Service shows that rapid strides are being made in developing emergency call systems. In 1948, only about sixty medical societies reported having a formal plan for handling emergency and night calls; in 1948 the number was estimated at between 100 and 120, and in 1950 it had risen to more than 350. There is still need for more work on the problem, especially among the smaller medical societies.

* * *

The Michigan Heart Association announces that more than $185,000 has been allocated during the past two and one-half years for research studies into diseases of the heart and circulatory system. This figure was contained in the Michigan Heart Association second annual report recently released by Douglas Donald, M.D., Detroit, President of the Association.

The Arthritis and Rheumatism Foundation, Michigan Chapter, recently presented to the Visiting Nurse Association of Detroit a motor car for use in home-care treatment of disabled arthritics. The car was presented by J. J. Lightbody, M.D., Detroit, Chapter Medical Director, to Emilie G. Sargent, R.N., Executive Director of the Visiting Nurse Association. The Chapter also provided the equipment for the automobile including a portable diathermy and infra-red units for treatment.

* * *

L. Fernald Foster, M.D., Bay City, Secretary of the Michigan State Medical Society, has been invited to address the Philadelphia Rotary Club on April 30. His subject will be "The Michigan State Medical Society's Formula For Freedom."

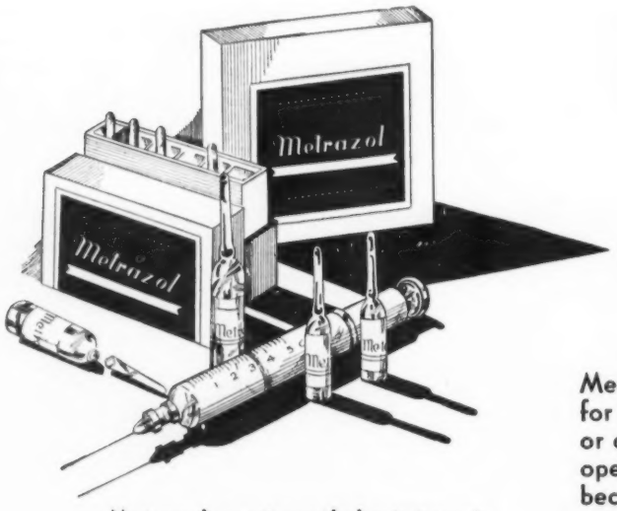
* * *

G. B. Saltonstall, M.D., Charlevoix, was appointed by Council Chairman William Bromme, M.D., as official MSMS representative to the American Medical Education Foundation "kick-off" meeting of February 17, 1952 in Chicago.

* * *

The Clara Elizabeth Fund-Genesee County Medical Society Lectures of 1952 are scheduled for October 8 in Flint. Two of the three speakers have been announced: John Parks, M.D., George Washington University School of Medicine, Washington, D. C.; and William F. Mengert, M.D., Southwestern Medical School, University of Texas.

All members of the Michigan State Medical Society



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are cordially invited to hear the Clara Elizabeth Fund Lectures on October 8. For program, write David B. Treat, Director, 302 W. 2nd Ave., Flint.

* * *

The eighth annual meeting of the American College of Allergists will be held at the William Penn Hotel, Pittsburgh, on April 7-8-9. For program and full particulars, write the College at 401 LaSalle Medical Building, Minneapolis 2, Minnesota.

* * *

The Texas Medical Center, Houston, Texas, announces several meetings of interest to scientists and doctors of medicine to be held April 25-26, 1952: Sixth Annual Symposium on Fundamental Cancer Research; Cancer Pathology and Radiology Conference; South Central Section of the College of American Pathologists.

All meetings will be held at the Shamrock Hotel. For further information, write William O. Russell, M.D., 2310 Baldwin St., Houston 6, Texas.

* * *

The American Congress of Physical Medicine will hold its thirtieth annual scientific and clinical session at the Roosevelt Hotel, N. Y., August 25-29, 1952. For program and further information, write the Congress at 30 N. Michigan Ave., Chicago 2, Illinois.

* * *

Mac F. Cahal, Executive Secretary of the American Academy of General Practice, recently announced the five hospitals and the five medical schools selected to nominate candidates for the Mead Johnson General Practice Scholarship. They include Stamford Hospital of Stamford, Conn., Methodist Hospital of Indianapolis, Ind., Crawford W. Long Memorial Hospital of Atlanta, Ga., John Gaston Hospital of Memphis, Tenn., and Dr. W. H. Groves Latter Day Saints Hospital of Salt Lake City, Utah. These hospitals were selected as representing all sections of the country.

The five medical schools selected to name seniors eligible for the awards for residency work starting in 1953 are: University of Kansas, University of Wisconsin, Medical College of Virginia, University of Rochester, and the University of Washington.

* * *

Maurice G. Wynes, M.D., who was graduated from the University of Michigan Medical School in 1939 and took his internship at Grace Hospital, Detroit, has been appointed Assistant Medical Director of the Medical Consultant Service of Armour Laboratories, Chicago.

* * *

"The Making of Shoes" is the title of a 16 mm. sound film (12 minutes). This is an Encyclopaedia Brittanica production (owned by the Michigan Shoe Retailers Association), and depicts the various stages in the manufacture of shoes.

This film, of interest to many doctors, may be obtained by writing the Michigan Shoe Retailers Association, attention Morton Hack, Vice President, 28 West Adams Avenue, Detroit 26. No rental.

* * *

At the Annual Meeting of the Medical Staff of Providence Hospital, Harold Henderson, M.D., of the Obstetrics and Gynecology Department, was elected Chief

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of Staff-Elect, and Francis B. MacMillan, M.D., of the Department of Traumatic Surgery, was elected Secretary-Treasurer. Wm. L. Sherman, M.D., retired as Chief of Staff, turning over the office to W. B. Harm, M.D.

* * *

Qualifications of Parents.—Professional men have about twice as many distinguished offspring as business men, twenty times as many as farmers, forty times as many as skilled laborers and one thousand times as many as unskilled laborers.—STEPHEN S. VISHER, Ph.D., Geography Professor, Indiana University.

* * *

The Bureau of Indian Affairs in the Interior Department had 13,565 on its payroll last year. There were only 400,000 Indians in the United States, but one federal employe for every thirty Indians.

This is Social Security.

* * *

"Wish him a Happy Birthday at the President's Party."—That is the invitation to all members of the Wayne County Medical Society, annually, to attend its "President's Party." This year, the affair was held on February 2 in the Wayne County Medical Society club rooms (David Whitney House) at 4421 Woodward, Detroit. The affair honored Arch Walls, M.D., President of the Wayne County Medical Society. Over 200 members and their wives attended the social affair and gave honor to their leader of 1951-52.

This is a splendid manner in which to pay tribute to medical leadership, and deserves emulation by all Michigan county medical societies.

* * *

Income tax deduction and Postgraduate Courses.—The AMA has initiated correspondence with the U. S. Bureau of Internal Revenue regarding a review of the 1921 ruling which denied deductions to doctors of medicine for expenses incurred in taking postgraduate courses. A report to our membership in JMSMS will be made from time to time as the matter progresses.

* * *

From June, 1950, to February, 1951, the federal government filled new civilian jobs at the rate of more than 1,000 a day. Government civilian employment in February, 1951, exceeded 2,181,000.

* * *

Medical Family.—There's never a shortage of medical doctors when the family of Michigan Senator and Mrs. Haskell L. Nichols, of Jackson, stage a reunion.

Their oldest son, John W. Nichols, M.D., is practicing medicine at Galena Park, Houston, Texas, in association with his wife and father-in-law—both doctors, too. Dr. Nichols was graduated from Baylor University College of Medicine, Houston, in 1949. He served his internship and residency at Cleveland City Hospital before going to Texas. His wife, Ann Deaton Nichols, M.D., also received her medical degree at Baylor before interning at St. Luke's Hospital, Cleveland. Dr. Nichols' father-in-law is Grady Deaton, M.D.

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The oldest daughter in the Nichols family is serving her internship at Receiving Hospital, Detroit, following her graduation last June from the University of Michigan Medical School. But the medical relationship doesn't stop there. Her husband, Jack, is a Senior in the Wayne University College of Medicine. During World War II, he was a captain in the U. S. Air Force.

The two younger children of Senator and Mrs. Nichols, Ann and Don, are still at home. If they should decide to enter medical school, they can expect lots of help with their homework.

* * *

Two positions available at the State Prison of Southern Michigan: Associate Physician with starting salary of $818 per month with yearly increase to $929 per month at end of four years; Assistant Physician with starting salary of $704 per month with yearly increase to $814 per month at end of four years. Both positions are under Civil Service and are on a forty-hour-a-week basis; night and weekend duty is rotated. One day per month is allowed for vacation and sick leave. If interested, contact Russell L. Finch, M.D., Medical Director, State Prison of Southern Michigan, 4000 Cooper Street, Jackson, Michigan.

* * *

Bay City Medical Assistants.—To acquaint physicians' office personnel with the activities of the Michigan State Medical Assistants Society and the **Formula For Freedom** program, the Bay County Medical Assistants Society will sponsor a one-day conference at the Winona Hotel, Bay City, Sunday, May 18, 1952.

Patricia Kaczmarek, Bay City, President of the Bay County organization, states that all medical assistants in the northeast area, whether members of the Medical Assistants Society or not, will be invited to attend the meeting. Invitations will be issued to medical office personnel in the counties of Saginaw, Huron, Tuscola, Midland, Iosco, Arenac, Gladwin, Isabella and Genesee.

* * *

E. F. Sladek, M.D., Traverse City, Past President of the Michigan State Medical Society, has been appointed by the Governor to the Commission on Migrant Workers.

* * *

Establishment of the President's Commission on the Health Needs of the Nation is the latest maneuver in President Truman's campaign to socialize the medical profession. This commission, to be financed from emergency funds allocated for national defense, is a transparent fraud on the American people. Every physician and all others associated with us in caring for the health of the nation should clearly understand its absurdities and its dangerous political significance.—**John W. Cline,** M.D., President, American Medical Association.

* * *

Otto O. Beck, M.D., Birmingham, MSMS President, spoke on "The Beaumont Memorial Restoration" on the occasion of the Annual Clinic Day of Mt. Carmel Mercy

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Hospital, Detroit, January 30, 1952. Dr. Beck was guest speaker at the Hospital luncheon.

* * *

Hill-Burton Hospital Construction Program.—According to a year-end analysis of the Hospital Facilities Division of the U. S. Public Health Service, 58 per cent of the 1,023 new projects are located in communities of less than 5,000 population and 10 per cent are in cities of 50,000 or more. Of the new hospitals, 57 per cent have less than fifty beds and only 19 per cent have more than 100 beds. In the aggregate, estimated total cost will be $1,288,936,793, of which the federal share will be $466,014,715.

* * *

The Michigan Health Officers Association will hold its biennial meeting at the Statler Hotel, Detroit, on May 14, 15 and 16, 1952. For program, write V. N. Slee, M.D., Secretary, Hastings, Michigan.

* * *

Bond-A-Month Plan.— In the interests of the important defense effort, all members of the American Medical Association are urged by Dwight H. Murray, M.D., National Bond Chairman of the AMA, to participate in the "bond-a-month plan." Three letters are being sent to all AMA members by Dr. Murray urging practicing physicians to purchase Defense Bonds. The first letter in part states:

"Operation of the plan is simplicity itself. You merely decide how much you wish to put aside each month, and what type of Bond best fits your needs—Series E, F, or G. Your bank does the rest, automatically. You can set up the whole arrangement in two minutes, merely by filling in the form attached to the enclosed folder and mailing it to your bank."

ARE DOCTORS HUMAN?

". . . isn't it strange how seldom one gives a thought to who the doctor is, where he comes from, or what he is really like? Generally it is enough to know there is such a person to call on in case of need, like the fireman or policeman. Perhaps it is natural to think of him thus, but it would be nice for the doctor to be thought of as a person. After all, he is human, too.

"The practicing life of a physician is not great; his work is never done and his hours are long and irregular. The equipment he must buy, if he is to practice the best type of medicine, is expensive.

"Unlike the merchant, the doctor cannot go away and let someone else take over his business for a while. When he leaves town, his income stops. If one deducts the cost of his expensive education and prorates his total earnings over his years of study and training, the doctor is clearly not overpaid.

"Life's stream is flowing more swiftly nowadays and has caught both the patient and the doctor in its turbulent whirl. As a result, each of them has lost something in the way of human values. If everyone were to make a sincere attempt to become acquainted with his own medical adviser, he would find that doctors are people, too."—*Coronet Magazine,* February, 1952.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

TREPHINE TECHNIQUE OF BONE MARROW INFUSIONS AND TISSUE BIOPSIES. By Henry Turkel, B.A., M.A., M.D. Detroit: Gale Printing Co. Price $1.00.

HUMAN STERILIZATION—TECHNIQUES OF PERMANENT CONCEPTION CONTROL. By Robert Latou Dickinson, M.D., and Clarence James Gamble, M.D. New York: Waverly Press, Inc.

SOME CONTEMPORARY THINKING ABOUT THE EXCEPTIONAL CHILD—Proceedings of a Special Conference on Education and the Exceptional Child of the Child Research Clinic. The Woods Schools—A Private School for Exceptional Children. Langhorne, Pa.: Woods Schools, 1949.

OCCUPATIONAL FACTORS IN THE AETIOLOGY OF GASTRIC AND DUODENAL ULCERS WITH AN ESTIMATE OF THEIR INCIDENCE IN THE GENERAL POPULATION. By Richard Doll and F. Avery Jones with the assistance of M. M. Buckatzsch. London: His Majesty's Stationery Office, 1951.

NEW AND NONOFFICIAL REMEDIES, Containing Descriptions of the Articles which Stand Accepted By the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1951. Issued Under the Direction and Supervision of The Council on Pharmacy and Chemistry, American Medical Association. Philadelphia: J. B. Lippincott Co., 1951.

A STUDY OF EPILEPSY IN ITS CLINICAL, SOCIAL AND GENETIC ASPECTS. By Carl Henry Alstrom. Stockholm: 1950.

CLINICAL AND ROENTGENOLOGIC EVALUATION OF THE PELVIS IN OBSTETRICS. By Howard C. Moloy, M.D., M.Sc. Assistant Clinical Professor of Obstetrics and Gynecology, College of Physicians and Surgeons, Columbia University, and The Sloane Hospital for Women. Philadelphia: W. B. Saunders Co. Price $2.50.

PHYSICAL MEDICINE AND REHABILITATION FOR THE CLINICIAN. Edited by Frank H. Krusen, M.D., with articles by twenty-four doctors. Philadelphia: W. B. Saunders Co., 1951. Price $6.50.

The subject of physical medicine is growing in recognition and importance. This book is a text on the subject based largely on lectures on the subject given by twenty-four teachers in their instruction classes. The subject in general is divided into four groups: (1) therapeutic application of physical agents and procedures; (2) diagnostic applications of physical agents and procedures; (3) clinical aspects of physical medicine and rehabilitation; (4) fundamentals of anatomy, therapeutic exercise and physiology related to physical medicine and

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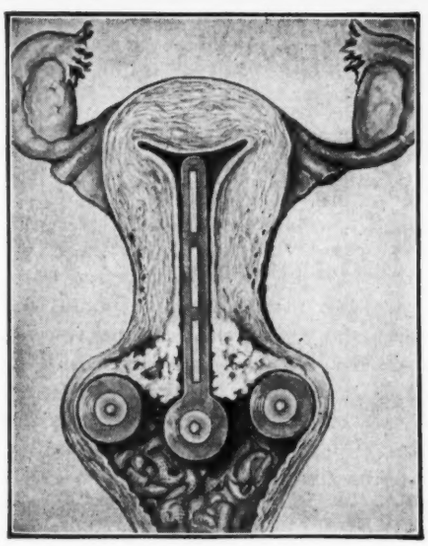

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rehabilitation. Throughout, the pressure is related to methods and means of rehabilitation. The course is comprehensive, and by different writers who use style and modes of expression to hold the student's attention.

DIABETES MELLITUS. Principles and Treatment. By Garfield G. Duncan, M.D., Clinical Professor of Medicine, Jefferson Medical College; Director of the Medical Divisions of the Pennsylvania Hospital and the Benjamin Franklin Clinic, Philadelphia. Illustrated. Philadelphia: W. B. Saunders Co., 1951. Price $5.75.

In a subject that is still as controversial as diabetes, a new book on diabetes mellitus is certainly most welcome. The author's objectives are twofold: first, to summarize and correlate latest principles in the understanding and treatment of the disease and, second, to present a practicable and simplified outline of therapy. That these objectives have been attained is evident upon even a cursory perusal of the text. Closer study reveals, that almost all fields of Medicine have been touched, illustrations have been used freely and detailed descriptions have been given to the many facets of therapy.

The format of the book is very good. Its size, type and form make for easy reading. There are nineteen chapters with headings from the history of the disease to the treatment of the diabetic child. Those sections on carbohydrate metabolism, pathology, insulin therapy, and the complications of diabetes, both acute and chronic, deserve special commendation. This text is of marked value to the physician and student and the author and his collaborators are to be congratulated.

G. W. S.

BULLETIN ON CURRENT LITERATURE. The monthly bibliography for workers with the handicapped. Chicago: The National Society for Crippled Children and Adults, Inc.

This is a twenty-two page mimeographed listing of every article published in the specified time covering the subject of crippled and afflicted children. There is a short abstract, so one may judge the article, and determine whether to seek it out for further study. This is a monthly publication, one dollar.

ELECTROENCEPHALOGRAPHY IN CLINICAL PRACTICE. By Robert S. Schwab, M.D., Director of the Brain Wave Laboratory, Massachusetts General Hospital, and Associate in Neurology, Harvard Medical School. 187 pages. Illustrated. Philadelphia: W. B. Saunders Co., 1951.

The author states that the purpose of this book is to discuss the uses and limitations of electroencephalography in the diagnosis and study of diseases of the nervous system. He states definitely that it is not a manual for the electroencephalographer or in any sense a textbook in this field.

For a small volume of 187 pages, there is a rather complete coverage of the subject. The author begins with a historical summary. The next chapter is on the relationship of neurophysiology to electroencephalography. Then there is a presentation of the normal and abnormal recordings. The normal includes adults, adolescents and the child. The fourth chapter pertains to technique, viz: recording apparatus, examination room, electrodes and

their placements, technique of localization, artifacts and special techniques. There are chapters on the electroencephalogram in epilepsy, neurological and neurosurgical problems, in psychiatry and in research. The last chapter deals with laboratory organization, training of staff and interpretation of records.

While this book is not an atlas, it nevertheless is profusely illustrated. It is not a reference book, yet the completeness of the coverage of subject matter is such that this small volume can be recommended to neuropsychiatric specialists or to anyone else interested in the subject.

G.K.S.

DYNAMIC PSYCHIATRY BASIC PRINCIPLES. Volume One. By Louis S. London, M.D. 95 pages. New York: Corinthian Publications, Inc. Price $2.00.

The author has written a small book, designated Volume I, which purports to be a series on the subject of dynamic psychiatry. It is an exposé of the theories of Freud. The first half of its ninety-five pages deals with the history of psychiatry. There is a short chapter on the meaning of dreams. Then the author discusses briefly the theories of the libido. He admits that he does not know the composition of the libido or its embryology or physiology. The last chapter is devoted to the development of the libido in the child and the libido in the adult.

The author is a Freudian psychoanalyst. The tenor of his writings is in conformity to his training and conditioning along those lines.

G.K.S.

A TEXTBOOK OF CLINICAL NEUROLOGY. With an Introduction to the History of Neurology. By Israel S. Wechsler, M.D., Clinical Professor of Neurology, Columbia University, New York; Consulting Neurologist, The Mount Sinai Hospital, Montefiore Hospital and Rockland State Hospital, New York. Seventh Edition, Illustrated. Philadelphia: W. B. Saunders Co., 1952. Price $9.50.

A review of a text and reference book that has been in print for twenty-five years, now in its seventh edition, and has been seen and read by everyone interested in neurology needs no comment. The author has again brought the text up to date. No changes have been made in the general arrangement. There are some minor textual transpositions, but the book greatly resembles the fifth edition to which it was compared. There are about forty-five fewer pages. The author states that he tried to incorporate what is new and valuable, to correct that which is no longer tenable in the light of present knowledge and to prune away all that appeared to be obsolete. In all of this, he again has succeeded.

G.K.S.

YOUR WEIGHT AND YOUR LIFE. A Scientific Guide to Weight Reduction and Control. By Alfred L. George, M.D. New York: W. W. Norton & Company, Inc. Price $2.95.

Overweight is a real danger to a great number of the American people. The recognition of the condition and the correction are a challenging problem to the physician, and to the victim who must reduce. This book teaches, and repeats frequently, the fact that overweight is the result only of having eaten too much. There is no

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such thing as inheriting it, or a glandular condition which increases weight. The only source of fat in the body is that which has been eaten.

Having accepted that fundamental fact the book describes the various foods and their values, the processes of metabolism, the digestion and utilization of foods, and the build-up of fat and protean tissue. A chapter is devoted to the cause of overweight. Another to glands, as a cause of overweight. Why do people overeat? The psychology of weight reduction, poor ways to reduce, and the fat are gullible. Under instructions given in this book it is easy to lose weight. A chapter tells of the nutritional aspects of weight reduction, giving the values in body building and in fat loss. A chapter tells how to eat and reduce, using the foods that satisfy in bulk but carry too few calories to add to one's weight. A chapter offers outline diets, with various alternates, telling how much, with the caloric values alongside. These lists are extensive, covering breakfast, lunch or supper, lunch substitute, and dinner. Then follows basic diets for each day of the week for 1200 calories, and 1500 calories, with instructions how to add or subtract.

Finally, there is an appendix giving the sizes of servings and the caloric values of practically all common foods. This book is valuable to the physician, who must direct his patient, but is also an invaluable guide to the patient, and is so intended.

TEXTBOOK OF REFRACTION. By Edwin Forbes Tait, M.D., Ph.D., Associate Professor of Ophthalmology, Temple University School of Medicine; Attending Surgeon (Ophthalmology), Temple University and Montgomery Hospitals; Fellow, Philadelphia College of Physicians, and American Academy of Opthalmology and Otolaryngology; Member, The Pan-American Association of Opthalmology, and The Association for Research in Ophthalmology. Illustrated. Philadelphia: W. B. Saunders Co., 1951. Price $8.00.

Dr. Tait has taught refraction, and practiced it for many years. With that experience he has recognized the need for a textbook on refraction. This book starts with the fundamentals, giving the physics of optics, lenses, binocular function. A space is devoted to refraction formulae, and their interpretation, ocular reflexes, accommodation, and the normal eye. Chapters are then devoted to hyperopia, myopia, astigmatism, presbyopia.

Considerable space is given to the recognition and treatment of progressive myopia. The reviewer could tell the professor of a means he has used for nearly forty years, with almost complete success. Use a drop of adrenaline in each eye night and morning. We have done it in hundreds of cases and can show records. Every instrument in use in refraction is pictured, described, and evaluated.

The book is very well done, and most acceptable. We have noted with interest certain tricks, especially the handling of amblyopic eyes.

HANDBOOK OF DISEASES OF THE BLOOD. By A. Piney, M.D., M.R.C.P. Physician, St. Mary's Hospital, Plaistow; late Director, Pathological Department, Cancer Hospital, and Charing Cross Hospital Institute of Pathology, London. Philadelphia: J. B. Lippincott Co. Price $5.00.

This little book of slightly more than 200 pages has the avowed purpose of attempting to separate the practical aspects of the many complicated diseases of the blood from the maze of material comprising the science of hematology which has grown up in the past twenty-five years.

The text stresses throughout the clinical side of the disorders of the blood and attempts at brevity and usefulness to the practising physician.

For those interested in furthering a working knowledge of diseases of the blood, without wading through a mass of detailed material, this text is to be recommended. It is in no sense a substitute for the standard working texts on hematology. R.W.B.

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